

## Abstracts of the 23rd Annual International Symposium of the Ibadan Medical Specialists Group, United Kingdom on 8th November 2023

Held at the College of Medicine University of Ibadan, Nigeria

## **Oral Presentations**

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## Citing the abstracts in this supplement

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## OP01

# Breast cancer burden and its implications on the Nigerian patient

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The fact that breast cancer is the commonest female cancer worldwide is no longer news. The more intriguing information, however, is the increasing incidence of the disease in African populations that previously had low incidence rates. The rising incidence of breast cancer in Africa has been attributed to many factors acting synergistically including increasing life expectancy, decreasing fertility, lifestyle changes and environmental factors. Moreover, the peculiar epidemiological, demographic and clinical characteristics of the disease make it a matter of grave public concern. Added to these are the persisting challenges of treatment delays, inadequate management modalities, cost of care, and poor survival indices. In addition to discussing these issues, this presentation focuses on the social, economic and psychological burden of breast cancer on Nigerian women.

Findings from a mixed method study on the social, economic, psychological impacts and quality of life of breast cancer at the surgical oncology division, University College Hospital, Ibadan, Nigeria revealed that most patients were artisans and petty traders, presented late, and were low-income earners. The average cost of care per patient amounted to US\$11,600, of which 39% was spent on chemotherapy and 32% on quantifiable losses. The main sources of funding of care were family members and spouses supporting an assertion in a publication that 'breast cancer in Nigeria is a family disease'.

The psychological morbidities they experienced included loss of self-esteem, depression and sexual dis-satisfaction. Late presentation was significantly associated with worse self-esteem and quality of life parameters. Nine out of ten would rather not attend social functions because of their appearance. Depression was worsened by an unsupportive spouse while many experienced a lack of spousal advances post-diagnosis. However, married women had higher emotional function and a significantly better quality of life, while breast padding as camouflage postmastectomy significantly enhanced their QoL and body image perception.

Keywords: breast cancer; social; economic; psychological implications; Ibadan; Nigeria

#### **OP02**

# Limitations in the management of colorectal cancer in sub-Saharan Africa

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Colorectal cancer (CRC) was regarded as a rare disease in native West Africans. It is now accepted as an established disease with a rising incidence. The CRC is now known to be a complex tumour with different aetiopathological pathways. With all cancers early detection is important if one aims to cure the patient. A summary of the clinical features include: Unexplained ill-health and anaemia in patients with cancer of the caecum and ascending colon; palpable abdominal mass for colon cancer; rectal bleeding and tenesmus for carcinoma of the rectum; palpable mass on digital rectal examination in at least 75% of cases. The current complete management of this disease involves extirpative surgery and adjuvant treatment with a combination of cytotoxic chemotherapy and tailored therapy.

This presentation will look at ways in which seamless management of CRC in this environment is hampered.

## The **'PATIENT'** factor:

- 1. Ignorance (which leads to unfavourable health-seeking behaviour)
- 2. Poverty (goes for all developing countries)
- 3. Gullibility (under which falls religion and alternative treatment)
- 4. Cultural taboos (which lead to refusal of colostomy-based treatments)
- Aversion of the sequelae of rectal cancer treatment especially in males where up to 30% of patients are under the age of 40 years.
- 6. Late presentation (effect of 1-5)

#### The 'COUNTRY' factor:

- 1. Politics: inadequate budget for health
- 2. Workers not enough; current brain drain of doctors, major cancer centres are stretched.
- Infra-structure: There is a glaring lack of any population screening programme, a lack of public enlightenment messages for awareness and only two government centres have functioning radiotherapy machines.
- Staplers and cytotoxic drugs have to be imported, thus are expensive and out of reach of the common man.

## The 'GENETICS' factor:

The biology of CRC in the native African is different from that of Caucasians and more aggressive. Carcinomatosis peritonei is frequent. There's also the emergence of unusual metastases to the lungs and spine, bypassing the liver. A summary of the findings by Nigerian researchers on the molecular biology of native Nigerian CRC showed MSI (Not otherwise stated) occurred in 23–53% of Nigerian CRC, MSI-H seen in 28.1–43%. KRAS in 21% while BRAF was seen in 4.5%. The significance of these results may mean that we might not be administering the right combination chemotherapy in over 50% of our patients.

Some studies have shown that patients with MSI-H CRC appear to have ineffectual or even detrimental responses to 5FU-based adjuvant chemotherapy. We all know that 5FU is the cornerstone of most of the combination chemotherapy we administer to patients (FOLFOX, FOLFIRI, CapeOX, XeIOX). In addition, the 2012 study on BRAF and KRAS in Nigerians by Abdulkareem et al. also suggests that Nigerian patients may benefit more from anti-EGFR therapy (Cetuximab, Panitumumab) than Caucasians. However, cost implications will make prescribing these drugs a mere academic exercise in most Nigerian patients.

#### **OP03**

# Head and neck cancers: epidemiology, diagnosis and treatments

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*Introduction:* Head and neck cancers (HNC) affect many subsites in the upper aero-digestive tract. The risk factors include tobacco smoking, chewing betel nut/paan, excessive alcohol consumption, hereditary factors and viruses such as human papillomavirus (HPV) and Epstein–Barr virus (EBV). Early diagnosis, lifestyle changes and HPV vaccination will improve survival.

*Epidemiology:* Globally, recent estimates from GLOBOCAN shows there are 890,000 cases of head and neck cancers annually and 450,000 deaths annually (1). There is an increasing incidence of oral cavity, lip, buccal cancers in the developing world due to higher consumption of

tobacco, alcohol and chewing areca nut. There has been an increasing incidence of some HNC due to high-risk strains of human papillomavirus (HPV) (2). Cancers caused by HPV include tonsil cancer, tongue base cancer and unknown primary cancers. The EBV causes nasopharyngeal cancers especially in the Far East. There is a decreasing incidence of some cancers caused by smoking such as laryngeal and hypopharyngeal cancers mainly due to the reduction in smoking rates in some developed countries.

Overall, there is a predicted increase in HNC of up to 30% annually by 2030 (2). The HPV-associated cancers affect mainly younger males, who do not necessarily smoke or drink alcohol. The HPV is a strong prognostic factor so patients with HPV positive cancers respond better to treatment as there are less genetic mutations when compared to cancers driven by tobacco smoking. These trends are alarming with socioeconomic impacts.

*Diagnosis:* Symptoms of HNC include difficulty swallowing, persistent sore throat, difficulty breathing, hoarseness, neck lumps, referred pain to the ear, weight loss, and systemic symptoms in advanced disease. A full ENT examination is performed of the oral cavity, oropharynx, neck and ideally flexible nasendoscopy. Ultrasound-guided FNAC or core biopsy of neck lumps are performed. Cross-sectional imaging with CT or MRI scans followed by tumour biopsies either under local or general anaesthetic.

Tumour biopsies are assessed using H&E stains, and tests for HPV detection (p. 16 immunohistochemistry, in situ hybridisation or polymerase chain reaction). A PETCT scan is useful for staging cancers, identifying the origin of unknown primary cancers and for surveillance.

*Treatments:* The head and neck cancer multidisciplinary team reviews all investigations and recommends either curative or palliative treatment options that are in every patient's best interests.

Surgery can be open, endoscopic or with the use of a robot. Microvascular reconstruction with flaps is performed as necessary to improve function and quality of life. Oncologic treatments include intensity-modulated radiotherapy (IMRT), which can be combined with chemotherapy. Immunotherapy is a second-line treatment for recurrent HNC currently. Advanced cancers can be treated with palliative intent or best supportive care especially if the patients are frail and have significant comorbidities.

There are ongoing clinical trials and research studies exploring better, less-toxic treatments. Multiomics approach and artificial intelligence are exciting developments.

*Conclusion:* There is an increasing incidence of some HNC especially cancers driven by tobacco smoking, alcohol consumption and high-risk human papillomaviruses. Smoking cessation, HPV vaccination, early diagnosis and improvements in treatments are important factors in ensuring good outcomes.

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### **OP04**

# Experiences of University College Hospital, Ibadan surgical residents in audit and research

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An online monthly seminar was started in April 2021 for surgical residents at the College of Medicine University of Ibadan by a faculty of alumni based in the United Kingdom. The surgical residents felt the seminars will make them better clinicians, fill gaps in their training and find out about Gold Standards of care. Moodle learning management system was used to manage course materials, communication, feedback, online surveys, and interaction with trainees. Seventy-two residents registered, but only about 30 were core attendees. All recorded lectures were placed on You Tube https://www.youtube.com/playlist?list=PLXzLiMlwy2s-jLAacZLav58h7aj7qXZaWZ. Topics were multispecialty and determined by the residents.

At the same time, an audit-and-research group (ARG) was formed, with eight residents joining. This number has risen to 14. The ARG was a response to a survey assessing residents' experiences in research and audit. Thirty-seven surgical residents, with an average age of 34.3 years, completed the question-naire. Forty-three per cent were senior residents and 84% were males. Forty-three percent were general surgery residents, 16% orthopaedics and 11% in urology, 8% in neurosurgery and 8% in paediatric surgery. The rest were from plastic, ENT and cardiothoracic surgery. The median number of years from graduation was 9 years with an inter-quartile range of 7–11 years.

Sixty-five per cent of residents had not done any audit since graduation, and only 24% had completed an audit cycle. All residents agreed that surgeons should do audits, and all agreed that it was good for clinical practice. Ninety-five per cent agreed that surgeons should do a least an audit annually, however, only 68% of residents indicated that they would like to do an audit. Eighty-one per cent of residents had never presented an audit or research work, oral or poster, at a national or international meeting, and 65% have never been an author in a peer-reviewed article. Ninety-seven per cent indicated that they would like to take part in a study.

The six top reasons given for poor audit and research outputs by the residents were (multiple answers allowed):

- 1. Not knowing where to start by 60% of surgical residents
- 2. No support for it by 46%
- 3. No source of funding by 38%
- 4. Audit and research is not a culture in their environment by 38%
- 5. No opportunities by 24%.
- 6. No suitable role models by 16%

After completion of training, 76% of residents indicated that they wanted to work in a teaching hospital.

In two and half years since its formation, the ARG has completed a qualitative study on clinical learning environments (OP05) and an audit on the use of WHO surgical safety checklists in theatre (OP06). These were supervised by both a local faculty and a UK-based alumnus. These have generated two oral and one poster presentations at international conferences.

#### **OP05**

## Memorable learning experience, impact of school on life, and perception of clinical learning environment among nursing and medical students

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*Background:* The learning environment impacts students' motivation, success, and fulfilment, and central to this is the psychological safety of students. Psychologically safe environments lead to collaboration, positive learning experiences, and effective practitioners.

*Objectives:* The study aimed to assess the perception of the clinical learning environments of medical and nursing students at the College of Medicine, University of Ibadan, Ibadan, Nigeria.

*Methods*: This was a cross-sectional study carried out in November, 2021 using the validated questionnaires – Dundee Ready Education Measure (DREEM) and the John Hopkins Learning Environment Scale (JHLES) as well as two open-ended questions (OEQs). The OEQs were 'tell us about a memorable learning experience in medical/nursing school' (MLE) and 'what impact has your time in medical/nursing school had on your life' (IoL). Data were collected from third to sixth-year clinical medical, and first to third-year nursing students and analysed using SPSS v23. For the OEQs, an inductive approach was used for manual coding and thematic analysis. Coding and themes were both semantic and interpretive and data were managed using NVIVO v14 software. The responses to the OEQs were graded on a Likert scale from 1 (very negative) to 5 (very positive).

*Results:* A total of 193 students completed the validated questionnaires with a mean age of 22 ( $\pm 2.58$ ) years. The mean total DREEM score was 111/200 ( $\pm 10.2$ ), interpreted as more positive than negative. However, the perceptions were more negative than positive in two of the five DREEM domains – perception of the atmosphere and social self-perception. The mean overall JHLES score was 91/140 ( $\pm 14.8$ ), also more positive than negative, and this was so for all its seven domains. Nursing students had better academic self-perception than medical students (P = 0.002) while medical students had better perception of their learning atmosphere (P = 0.021).

Seventy-five students (39%) answered one or both OEQs, with 57 (29%) answering the memorable learning experience (MLE) and 59 (30%), the impact of medical/nursing school on life (IoL) question. Sixteen and twenty-two percent of answers to MLE and IoL questions were negative. No students gave negative answers to both OEQs. Overall, 29% of students gave a negative response to one question.

The overall themes for memorable learning experience questions were:

- 1. Novelty
- Enhancing experiences 'That teaching method made me feel seen as a student and got me excited to solve problems', by a 4th year medical student
- Learning environment atmosphere 'I was impressed by the way he was able to change the atmosphere from a very tense one to a funny and calm one'
- 4. Psychological effects.

For the impact on life questions, the overall themes were as follows:

- Personal development this included appreciation of hard work, motivation to be better people, purpose and direction in life, social and intellectual development.
- 2. Aspirational
- 3. Psychological 'it made me see that broken people break people'

*Conclusion:* Whatever the positive benefits of being a student are, psychologically unsafe environments, even for the very few, lead to negative psychological sequelae, poor overall learning process and health practitioners ill-prepared for the future. Despite the overall positive picture of the clinical learning environment in this study, there are significant areas of students' welfare that need to be addressed. It has been shown that a formal pedagogic programme for clinicians improve the quality of their student centred teaching (1).

Keywords: learning clinical environment; psychological safety; thematic analysis, DREEM

#### Reference

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### OP06

## Audit of the use of WHO surgical safety checklist and assessment of attitudes towards it among surgical team personnel in a Tertiary Hospital in Nigeria

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*Introduction:* The World Health Organization (WHO) Surgical Safety Checklist (SSC) launched in 2009 was developed to address preventable causes of morbidity and mortality in the perioperative period by promoting communication among all team members and ensuring that all necessary safety checks are done as and when due and that they are done appropriately. Studies have shown that implementation of the WHO checklist reduces the risk of SSI and preventable deaths by about 50%. Thus, it is encouraged that all hospitals, domesticate the tool to improve patient safety. The study aims to assess the level of usage of the WHO SSC, the gaps in its implementation and to evaluate the awareness, perception and acceptability of this tool among theatre staff personnel at a tertiary hospital in Nigeria.

*Materials and methods:* We prospectively conducted an audit of the use of the WHO SSC at the main and emergency theatres, University College Hospital, Ibadan by observing the level of implementation of the different events in the WHO SSC using a pre-developed questionnaire. We subsequently conducted a survey on the awareness, perception and acceptability of the WHO SSC among the operating team personnel using a 15-item self-administered questionnaire. The data were analysed with SPSS.

*Results:* A total of 117 surgeries were observed during the audit and 81 surgical team personnel took part in the survey. The WHO SSC was used in about half (52.1%) of the surgeries and it was sparingly used during minor surgeries (5.4%). The Sign Out Phase was the least completed phases of the checklist. The personnel administering the check list (usually the circulating nurse) did not ask the scrub nurse the required questions in more than half of the time (53.1-58.7%) in the Time Out Phase and this was significantly higher when compared with unasked questions to other professionals of the team (11.3-15.6%). In the Sign Out Phase, of the five questions, four questions were barely asked in about half of the time (44.6-76.8%).

Eighty-one per cent personnel were surveyed, half (50%) were surgeons and about a quarter were anaesthetists (23%) and Nurses (27%). More than half of respondents (58%) have more than 5-year work experience in the hospital. Majority (65.4%) of members of the surgical team had not had any formal training on the WHO SSC. About a third of respondents (28%) who had made an error in surgery agreed that it could have been prevented by proper implementation of the WHO SSC. The respondents also agree that the sign out phase was completed in less than a third (27.2%) of the time. There was no difference in its awareness, perception and acceptability based on profession of the respondents.

*Conclusion:* The WHO SSC should be made available at all theatres in the hospital and should be administered during all surgeries. There should be more formal training of members of the surgical team to improve implementation. Assessing for the barriers to the implementation of the WHO Safety Surgical Checklist is the logical next step to improve the use in our theatre.

Keywords: WHO; surgical safety checklist; awareness

#### **Clinical audit: principles and practice**

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Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the review of change. Aspects of the structure, process and outcome of care are selected and systematically evaluated against explicit and specific criteria. Where indicated, changes are implemented at an individual, team or service level and further monitoring is used to confirm the improvement in healthcare delivery. It is one of the six pillars of clinical governance.

Clinical audit involves evaluating three key areas of healthcare delivery: structure, process and outcomes. Clinical audit became mandatory for all clinicians in the United Kingdome in 1990 as a contractual obligation, and it has fuelled evidence-based medicine. The five stages of audit are identification of an audit topic, setting standards, data collection, data analysis, and implementation of changes if necessary. Closing the audit cycle by re-auditing to reassess if implemented changes have had led to improvements.

Audit could be indicated for quality assurance against local or national guidelines or because of recent adverse events or patient complaints. It should be specific, measurable, achievable, realistic (or relevant), and time bound. If no guidelines available, adoption of self-constructed standards will be necessary. Once completed, it should be shared with all stakeholders, including clinicians and management. Implementation of changes is essential, although it can be difficult. It needs a buy in and enthusiasm of all. Audit is now an important part of modern clinical practice. It drives improvement and effectiveness culture, and it is a duty we owe to our patients.

#### **OP08**

### An introduction to qualitative research for resident doctors

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Qualitative research involves systematically collecting, organising, and interpreting textual or other non-numeric data to better understand experiences and context, convey different perspectives on a complex issue, explore new concepts, and understand attitudes and perceptions of phenomena of interest. Qualitative research is also used to identify 'intangible' factors, such as social norms, gender roles, ethnicity, religion, and religiosity/spirituality. Unlike quantitative methods that ask the questions 'how many' or 'how much', qualitative methods focus on the 'what', 'how' or 'why' of a phenomenon. Resident doctors across disciplines can use qualitative research methods but often lack the skills and training to use these methods in their research work.

Qualitative and quantitative methods can complement each other through mixed methods approaches. This mixed methods approach to research may be useful across medical and surgical disciplines when one data source is insufficient, thus a second data source can enhance or complement the first. Combining multiple data sources allows researchers to triangulate the information they obtain. Qualitative research most often entails conducting interviews (in-depth interviews, key informant interviews), focus group discussions or observations (participant, non-participant). Tools used to

obtain qualitative data include in-depth interview or focus group discussion guides; case studies and vignettes may be introduced into such data collection endeavours. Qualitative data in the form of transcripts and field notes is obtained by using these tools. Observation checklists and diaries (e.g. time use, food diaries) may also be used to collect qualitative data.

Qualitative data analysis is often thematic, done either manually or using Computer Assisted Qualitative Data Analysis Software. In reporting the findings of qualitative research, illustrative quotes are usually employed. Qualitative research can be subjective and full of nuance, thus the need to assess its quality using criteria such as credibility, member checking and reflexivity. Ethical considerations, especially confidentiality is primarily important because of the relatively small sample sizes and the need to ensure participants' responses are not traceable to them.

## **OP09**

## Systematic review and meta-analysis

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A systematic review is a high-level overview of a particular research question that systematically identifies, selects, evaluates, and synthesizes all high-quality research evidence relevant to that question in order to answer it. It involves the synthesis of the results of multiple primary studies related to each other by using strategies that reduce biases and random errors. A well conducted systematic review provides high quality evidence for a clinical practice and is regarded as the gold standard evidence to inform clinical practice.

The process of conduct of a systematic review requires the formulation of a precise research question that should clearly identify the participants of interest, the intervention, the comparator group, and the outcome. This is then followed by the identification of relevant studies. It is important to use all available MeSH terms related to the research question. Common databases to search for studies include MEDLINE, EMBASE, CENTRAL, LILAC, OVID. While selecting studies, it is important to have a flow diagram describing the screening and selection process. Sample flowcharts and guidance of the screening process are available on the preferred reporting items for systematic reviews and meta-analysis (PRISMA) website.

While extracting the data, to reduce the risk of bias, two investigators are preferred, working independently to reduce the risk of bias. The analysis could be quantitative or qualitative depending on the type of data obtained and homogeneity of the studies included in the systematic review. It is not uncommon for a systematic review to result in a narrative review of current literature due to paucity of data required to conduct a quantitative analysis.

Meta-analysis was first defined by Gene Glass in 1976 as a statistical analysis of a large collection of analysis results from individual studies, for the purpose of integrating the findings. Meta-analyses could be cumulative, retrospective, or prospective. Most meta-analysis in literature are cumulative but prospective meta-analyses are associated with the least bias.

The results of a meta-analysis are presented in forest plot graphically. A forest plot would display the effect size estimates and confidence intervals for every study included in the meta-analysis. The meta-analysis should also have an assessment for the heterogeneity of the included studies. Commonly heterogeneity is assessed using statistical tests. The  $x^2$  and  $I^2$  tests are commonly used. A  $x^2$  test is a *P*-value of > 0.05 or  $I^2$  of greater than 75% indicates significant heterogeneity.

A meta-analysis can be carried out using a fixed or random effect model. Where there is no heterogeneity, a fixed effect model is used otherwise a random effect model is employed. An assessment of publication bias is also required to check that the results are not influenced by positive, significant, or small studies. This is displayed graphically in a funnel

plot and is recommended where more than 10 studies have been included in the meta-analysis. The publication of the results of the meta-analysis should follow the PRISMA guidelines. The guidelines are available on the PRISMA website (http://prisma-statement.org).

## OP010

## **Grant writing**

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Grant writing is the process of responding to an application for a financial grant from institutions such as research organisations, government agencies, corporations, foundations, trusts, and international funding organisations. The skills required to write successful grants are referred to as grantsmanship. Over the past few decades, the process of applying for grants has become increasingly complex and highly competitive. Therefore, the grant proposals must be based on innovative ideas, capable of advancing the current status of knowledge, compelling, and well-written.

#### **Types of Research Grants**

- Collaborative research grants are usually interdisciplinary, multicentre, and multicountry. These are led by senior researchers with a team of co-investigators including post-doctoral fellows, and postgraduate students.
- Fellowships are individual research grants that provide the fellow who obtains the grant the time to focus on the research project for a stipulated time.
- Targeted grants are for early-career, mid-career, or senior researchers. The grant announcement for these indicates the category of researchers who are eligible to apply.
- Networking grants are aimed at developing teams and establishing teams of academic and research collaborators for a particular research topic. These grants provide funding for researchers to engage in discussions regarding potential research ideas.

- Small grants fund small research projects or preliminary research that provide initial data for larger research projects in the future.
- Travel grants are usually for professional development and are provided by disciplinary specialist organisations. The researcher is supported to travel to institutions that have resources or opportunities that are not available at their home institution.
- Knowledge transfer grants or industrial partnerships are grants aimed at promoting collaboration and knowledge exchange between academic and non-academic collaborators. The funds can also be used for proof of concept, pilots, and getting new products to the market.
- Conference grants are used to disseminate research findings or host research conferences.

#### Grant proposals

The proposals should conform to the guidelines indicated in the funding opportunity announcement. Funders have guidelines regarding the sections of the proposals, font type, and font sizes to be used, sections of the proposal, page limits for each section, and the overall proposal.

#### **Project narrative**

This section provides the most comprehensive description of the proposed project. The main areas are the background and literature review that identify research gaps. It contains the research problem and questions/aims and objectives and documents the proposed research methods. Other areas addressed are the project management and delivery plan, which may require work packages. The budget and budget justification are also addressed in this section.

Other documents required are:

- The curriculum vitae of the investigators detailing their previous research and how it relates to the current application.
- Well-written letters of support from collaborators and collaborating institutions that address the roles and responsibilities of team members are essential. This is particularly important for collaborative research that involves various partners from other universities, non-academic organisations, and industry. These partners should provide signed letters of support that indicate the specific contribution of the collaborator and commitment research project, and the contribution in cash or in-kind.