

Curriculum Vitae

Isaac Tainzana MANYONDA

A. PERSONAL DETAILS AND CAREER HISTORY

| | |
|--|---|
| Personal details | 3 |
| Education - Schools and Universities attended, with dates. | 3 |
| Qualifications - academic and professional | 3 |
| Membership of bodies. | 3 |
| Present appointment. | 3 |

B. TEACHING

| | |
|---|---|
| Summary of current teaching duties; undergraduate and graduate. | 4 |
| Publications related to teaching. | 5 |

C. RESEARCH AND ACADEMIC PROFESSIONAL STANDING

| | |
|--|----|
| A summary of research interests | 6 |
| Selected publications (not more than 10) showing the quality of research | 12 |
| Summary of grant income | 14 |
| Summary of supervision of research students. | 17 |
| Research / Academic Accolades | 19 |

D. BIBLIOGRAPHY

| | |
|---|----|
| Publications - books written / edited | 23 |
| Publications – original research | 23 |
| Publications – review articles and commentaries | 27 |
| Publications – chapters in books | 29 |
| Publications – case reports | 30 |
| Publications – letters | 31 |

A. PERSONAL DETAILS AND CAREER HISTORY

Personal details

Address: 3rd Floor Lanesborough Wing
Division of Obstetrics & Gynaecology
Department of Clinical Developmental Sciences

Education

1971 - 1974 Waterford / Kamhlaba School, Mbabane, Swaziland
1975 - 1976 Westminster School, London, U.K.
1976 - 1982 St. George's Hospital Medical School, University of London

Qualifications

1979 **BSc** University of London: 1st Class (Hons); Prize student.
1982 **MBBS** University of London
1986 **R.C.O.G.** Family Planning Certificate
1987 **MRCOG** Royal College of Obstetricians & Gynaecologists
1994 **PhD** University of London

Membership of Bodies

Royal College of Obstetricians and Gynaecologists
British Society of Gynaecological Endoscopy
British Maternal and Fetal Medicine Society
British Medical Association
European Placenta Group

Present appointments: 1994 -

Consultant Obstetrician & Gynaecologist: - St George's HealthCare NHS Trust
Hon. Reader in O & G: - St George's, University of London (2006-)
Hon. Senior Lecturer in Immunology: - St George's, University of London (1994-)

B. TEACHING

1. Summary of current teaching duties; undergraduate and graduate

Undergraduate teaching

I participate in many of the undergraduate teaching programmes including:

- Regular lectures on the Obstetrics & Gynaecology programme
- Regular lectures on the Musculo-Skeletal Course (Pregnancy and Connective Tissue Disorders)
- Regular supervision of SSM modules.
- Regular “expert” on the GEP Course’s “Expert Forum”.

Postgraduate teaching / training

I teach & train postgraduates both formally and informally in the specialty of Obstetrics and Gynaecology. With the “New Deal” for junior doctors and the EU Directives, and hence the reduction in hours, the teaching and training of junior doctors has become a major challenge, with many trainers in a hands-on specialty such as Obstetrics and Gynaecology concerned about the quality of consultant that will be produced from the training that exists. I endeavour to expose junior doctors under my tutelage to as much practical experience as possible, while at the same time guiding them and exhorting them to develop an interest in research. This is not an easy task when a training number virtually guarantees a CCST and consultant post at the end of a 5 year programme. However, I am a committed teacher, and those juniors who have spent time on my team frequently express gratitude for my approach to their teaching and training. Over the past five years I have had specific requests from our Training Programme Director to take under my wing two Specialist Registrars whose training was deemed to be failing, and I am happy to say that I guided them back onto course.

At the request of Dr Leander Kroll, in 2008 I was also instrumental in guiding and supporting a medical student who had virtually exhausted his opportunities and was about to be expelled from the undergraduate programme. At the time of writing he is back on track and hopefully will complete his medical studies.

Postgraduate Courses

- I run a very successful Part II MRCOG Course (2 theory, and 2 OSCE per year)
- I run a similar Part II MRCOG Course (2 theory courses per year) in Bengaluru, India.
- I participate in other departmental courses throughout the year
- I am a regular teacher/supervisor on the RCOG Part II Course

- I lecture on the RCOG Part I MRCOG Course (two lectures: Basic Immunology and Immunopathology, and Immunology of Pregnancy).

In February 2000 I organized a very successful international meeting at the Royal College of Obstetricians & Gynaecologists (Title: Hysterectomy – Into the New Millennium).

In April 2008 I organized an over-subscribed international meeting on Diabetes in Pregnancy at the Royal College of Obstetricians & Gynaecologists.

2. Publications related to teaching

Books written / edited

Manyonda IT. **Uterine Fibroids**. Best Practice & Research Clinical Obstetrics & Gynaecology 2008; 22(4).

Manyonda IT. **Immunology of Human Reproduction**. 2006.

Thakar RB, Manyonda IT. **Hysterectomy**. Best Practice & Research Clinical Obstetrics & Gynaecology 2005; 19(3).

Manyonda IT. **Comprehensive Revision Guide for the Part II MRCOG Examination**. In Press. Due for publication 2009.

In collaboration with my erstwhile Research Fellows (Drs Vivek Nama and Rohan D'Souza) we have embarked on what we have termed the 4-book project in which we are writing 4 stand-alone but related books on Multiple Choice Questions, EMQs, Short Answer Questions and the Objective SCE for the Part II MRCOG – the George's Part II Revision Series. We aim to have completed this task by year end 2009.

C. RESEARCH AND ACADEMIC PROFESSIONAL STANDING

1. A Summary of Research Interests

My research interests can conveniently be divided into 5 broad categories namely pre-eclampsia, fibroid disease, gynaecological surgery and general obstetrics and gynaecology research, and more recently I have established international collaborations.. Below I have described each by topic, included my collaborators and funding sources where appropriate, and key references relating to the work.

Research on Pre-Eclampsia

Topic: Trophoblast Research

Collaboration: St George's, Dept of Biochemistry.

Funding: The Wellcome Trust -

Brief resume of the research:

The fundamental aim of my basic research has been to attempt to elucidate the regulatory mechanisms involved in human implantation and trophoblastic invasion, as defects in these processes are likely to be the basis of a wide range of pregnancy disorders including pre-eclampsia, intrauterine growth restriction and miscarriage, and perhaps even some cases of subfertility. Ethical constraints and inaccessibility of the site of implantation has rendered studies on human implantation especially difficult. Hence my work in the late-90's concentrated on the development of human models of implantation and trophoblastic invasion – we used DNA transfection technology to establish unlimited supplies of human trophoblast cell lines; and developed a 3-dimensional trophoblast-decidua co-culture explant model for studies of implantation and trophoblastic invasion.

Additional studies of trophoblast phagocytic activity as a potential mechanism of trophoblastic invasion ensued. I believe that phagocytosis is the central mechanism by which trophoblasts invade the maternal decidua, and current and future work is aimed at demonstrating the in-vivo events, and elucidating the regulatory mechanisms. This work came to a halt when my then PhD student / Research Fellow (Dr Mei Choy) left and failure to secure funding meant that I could not immediately replace her and continue with this line of enquiry. However, I am collaborating with Dr Nigel Page, Senior Lecturer at Kingston University (and a former collaborator when he was post-doctoral fellow at Reading University) to resurrect this research as very little advances have occurred in the areas of trophoblastic invasion over the past 5 years.

Key publications relating to this work: see Bibliography references 21, 24, 26.

Topic: Genetic mapping of early pregnancy events

Collaboration: University of Reading.

Funding: MRC Programme Grant awarded to Reading University.

Brief resume of the research:

To date most pregnancy markers have been identified serendipitously. It is therefore possible that there are other markers of pregnancy that are yet to be discovered which may prove vastly superior to those currently known. We have used RNA finger-printing as a strategy for identifying novel pregnancy markers in disease and health. So far our approach has been to study genes that are switched on or off at various gestations during human pregnancy, starting as early as possible. The studies utilize fetal tissue from pregnancy termination.

This approach has already led us to the identification of NKB as a potential mediator of the pre-eclampsia syndrome. We have also discovered novel tachykinins, and this latter discovery opens up a whole novel area of enquiry which has not existed before, and this may shed new light on the pathophysiology of pre-eclampsia, and indeed other pathologies of pregnancy.

Key publications relating to this work: see Bibliography references 14, 18, 19, 20.

Topic: Skin capillary density in normal and diseased pregnancy

Collaboration: St George's, Dept of Clinical Pharmacology.

Funding: British Heart Foundation - £125k over 2.5 years.

Brief resume of the research:

Women who develop pre-eclampsia during pregnancy are known to be at increased risk of developing cardiovascular disease in later life, including essential hypertension. Reduced capillary density (rarefaction) occurs in association with essential hypertension, and may pre-date the onset of the hypertension. Women who develop pre-eclampsia may have markers that pre-date the onset of the disease, such as abnormal capillary density. We have used intravital capillary video-microscopy to study functional (baseline) and structural (after maximization with venous congestion) skin capillary density in normal pregnancy and in pregnancies complicated by pre-eclampsia. The Research Fellow who conducted this work, Dr Vivek Nama, has created a "normogram" for capillary density in normal pregnancy, and after data analysis we will know if we can use capillary density to predict pre-eclampsia. We are seeking further funding to continue with the studies.

Key publications relating to this work: refer to Bibliography reference number 17.

Research on Fibroid Disease

Topic: Clinical research on fibroid disease

Collaboration: St George's, Interventional Radiology.

Funding: None current – imminent submission of major grant application to NIHR

Brief resume of the research:

Fibroids have a cumulative incidence rate by age 49 of 70% in white and more than 80% in black women, and thus are the commonest tumour during reproductive life. Although benign, in 50% of women they cause heavy periods, pelvic pain, pressure symptoms, and may compromise reproduction. They are the commonest indication for hysterectomy in the UK and USA, and therefore have a major impact on women's health and quality of life, and cost the NHS more than £100m in hysterectomies

alone. Much is unknown about fibroid disease: why they form; the extent to which they compromise reproduction; why some are symptomatic and others quiescent; and best practice in clinical management. New uterus-preserving treatments such as uterine artery embolization (UAE) and focussed ultrasound surgery have yet to be rigorously evaluated against conventional myomectomy. My areas of clinical research interest in fibroid disease include the following:

- UAE versus myomectomy in the treatment of symptomatic fibroids: over the past few years I have collaborated with Professor Anna-Maria Belli (Interventional Radiology) on a programme of research comparing UAE to myomectomy with respect to a clinical, quality of life and economic evaluation. We have published more than 4 papers on some of our work already, and additional papers are in preparation. More importantly, we have proved the feasibility of a larger national trial, and she and I are part of a national group which, following submission of a preliminary application, has been invited to submit a major grant application (£2.5m) to HTA to conduct a national multi-centre trial of UAE versus myomectomy.
- Optimization of surgical procedures in conventional myomectomy to reduce blood loss, reduce incidence of adhesions and maximise reproductive potential: I have developed innovative surgical techniques that lead to significantly reduced blood loss, and therefore enable me to offer myomectomy to women with massive fibroids who would be offered hysterectomy by most gynaecologists – these include the use of subserosal surgicell to seal serosal incisions, and the administration of vasopressin and tranexamic acid to drastically reduce blood loss, as well as the use of pre-myomectomy embolization in Jehova’s Witnesses and in women with previous or potentially very challenging myomectomies. I am currently writing two papers on these innovations, although it is difficult to conduct standard randomized trials because of obvious ethical constraints. I have recently edited a book on fibroid disease which reflects on my interests in fibroid disease.

Key publications relating to this work: see Bibliography references 3, 8, 10, 46, 47, 48, 49, 52. I am also writing a book aimed at the lay public (“Every Woman’s Guide to Fibroid Disease”), and editing another aimed at gynaecological surgeons (“A Synopsis of Modern Surgical Approaches to Fibroid Disease”).

Topic: Laboratory research on fibroid disease

Collaboration: Royal Marsden, Sutton.

Funding: MRC funding awarded to Dr Houlston.

Brief resume of the research:

Although a common tumour, much remains unknown about fibroids: in this relatively new collaboration the principal aim is to establish the genetics and molecular basis of the development of uterine fibroids. We have not yet succeeded in securing funding for this research, but we have started work and already published a paper (see below).

Key publications relating to this work: see Bibliography reference 5.

Research involving Gynaecological Surgery

Topic: Hysterectomy: total versus subtotal.

Collaboration: Mayday University Hospital; University of Sussex.

Funding: Previously funded by the NHS R&D. None current.

Brief resume of the research:

Historically, the uterus has been regarded as the regulator and controller of important physiological functions, a sexual organ, a source of energy and vitality, and a maintainer of youth and attractiveness. Little wonder therefore that removal of such an organ can and does generate fierce debate and controversy. In the late 80's and early 90's arguably the greatest controversy regarding hysterectomy was whether subtotal hysterectomy (when the cervix was conserved) conferred advantages over the total procedure (when the cervix is removed). I secured a £115k grant from the then NHS R&D programme to address the issue, and in October 2002 we published a major paper in the New England Journal of Medicine in which we summarized our key findings. In addition to the publication, the significance of our findings has been recognized by the award of numerous prizes at conferences for "best papers" presented (see "Academic / Research Accolades" page 26). This work formed the basis of an MD thesis for my research fellow, Dr Ranee Thakar, which she successfully defended in June 2003. In 2008 we completed a ten-year follow up of the women included in the original study, and have just had a paper published in Obstetrics & Gynecology, and again we were awarded prizes at three international meetings when we presented our findings. By this research we have resolved the controversy of total versus subtotal hysterectomy, and therefore an evidence base for best practice. We have also provided data that has not previously existed on long term outcomes of hysterectomy.

There are still many issues to explore and refine, and our current interest is in optimizing anaesthesia for hysterectomy: in essence we hypothesize that the type of anaesthetic used during open abdominal hysterectomy influences early cognitive function and recovery rates, and to that end we are about to embark on a trial of general anaesthesia versus combined spinal/epidural anaesthesia once we can resolve ethics issues. I am also interested in the issue of why there is such a wide variation in hysterectomy rates between hospitals in one region, between regions and indeed between countries.

Key publications: see Bibliography references 2, 9, 16, 29.

I have also edited a book with Dr Ranee Thakar on hysterectomy – see Bibliography: books edited.

Research in General Obstetrics & Gynaecology

Topic: Physical activity as an aid to smoking cessation in pregnancy

Collaboration: St George's, Psychology; UCL, and others

Funding: Health Technology Assessment - £1.2m over 4 years.

Brief resume of the research:

Smoking during pregnancy is the most important cause of preventable harm to babies and infants. Stopping smoking reduces this harm and also reduces women's risks of developing other harmful effects of smoking (e.g. cancer). Smoking cessation counselling can help pregnant smokers to stop but success rates are low and few women attend such treatments. In addition, many pregnant women prefer not to use pharmaceutical aids to smoking cessation. Moderate intensity activity (e.g. brisk walking) is recommended for nearly all women as part of antenatal care. For non-pregnant women, supervised

exercise (e.g. treadmill walking) can help them to stop smoking. Pilot work by the research team has shown that many pregnant women would be happy to join a research study testing exercise added to standard smoking cessation support.

The primary objective of the proposed study is:

1. To compare the efficacy of individual behavioural support plus a physical activity intervention relative to individual behavioural support alone among pregnant women on smoking cessation at the end of pregnancy.

Secondary objectives are:

2. To make comparisons as in 1. above: at four weeks of quitting and six months following the birth.

3. To compare between groups in 1. above: changes in self-reported physical activity levels between baseline and end of treatment and end of pregnancy.

4. To compare between groups in 1, above: during the first week of smoking abstinence, self-reported tobacco withdrawal symptoms, urges to smoke, perceived stress and self-confidence for quitting smoking.

5. To investigate whether physical activity levels are associated with smoking abstinence at end of pregnancy (or within two weeks of the birth) and six months following the birth.

Key publications to date: see Bibliography reference number 1.

Topic: Research on postnatal sexual health

Collaboration: Brunel University; Mayday University Hospital.

Funding: None current.

Brief resume of the research:

The area of postnatal sexual health is under-researched, and research is under-funded. I have had a major interest in this area for just under a decade now, and via un-funded research collaborations within and out-with St George's we have published a number of key papers. I am anxious now to seek funding to formalize this research and explore two specific areas: the male perspective on perinatal sexual health, and a more rigorous study of the impact of assisted vaginal delivery on postnatal sexual health. More robust and validated questionnaires and tools (such as more sophisticated endo-anal ultrasound scans) are now available to facilitate research in this area. There is also a growing recognition by funding bodies that this area is under-resourced, which may just render it more likely to secure funding.

Key publications to date: see Bibliography references 6, 13, 22, 25.

Topic: Bacterial vaginosis in human pregnancy.

Collaboration: St George's, Genito-Urinary Medicine; St George's, Obstetrics & Gynaecology.

Funding: Previously funded by NHS R&D. None current.

Brief resume of the research:

I no longer actively participate in this area of research, which is now the research interest of my former Research Fellow and now consultant colleague Mr Austin Ugwumadu. In collaboration with Dr Phillip Hay (GU Medicine) I supervised Mr Ugwumadu's research in this area and he was awarded his PhD in 2006. Papers were published in high impact factor journals including the Lancet (see below).

Key publications: see Bibliography references 4, 12, 15.

International Collaborations

Collaboration: Bengaluru, India).

Funding: Current funding from the organization "ARTIST" – see below.

Brief resume of the research:

In 2007 I was appointed Scientific Director of "ARTIST" [Asian Research and Training Institute for Skill Transfer], an organization based in Bengaluru, India, dedicated to the promotion of high quality clinical and laboratory research in India, and subscribing to the philosophy of translational research. I have been instrumental in developing research programmes in areas of particular relevance to obstetrics in India as follows: gestational diabetes and iron deficiency anemia in pregnancy.

Gestational diabetes mellitus: The research on diabetes is currently aimed at optimizing screening and diagnostic tools for gestational diabetes. We have recently submitted a paper to Obstetrics & Gynecology in which we report that the NDDG criteria for the diagnosis of gestational diabetes miss a significant proportion of women warranting treatment, and that the Carpenter & Coultson criteria are a better discriminator, especially in an Indian population where the incidence of gestational diabetes is high (approx 16% versus 3.5% in the West). We are now conducting comparative studies of glucose loads used in the oral glucose tolerance test in pregnancy. In the long term we plan to customize screening and diagnostic criteria to the Indian population.

Iron deficiency anemia in pregnancy: Evidence shows that the Iron and Folic Acid (IFA) programmes introduced some 30 years ago to eradicate iron deficiency anemia (IDA) in pregnancy have failed, as the prevalence of IDA has risen over the past three decades. Our own data based on rural and urban populations confirm this. We have initiated research programmes based on the use of intravenous iron sucrose to eradicate IDA.

2. Selected publications (not more than 10) showing the quality of research produced.

[Impact factors quoted are those for the year following publication]

1. Thakar RB, Ayers S, Clarkeson P, Stanton SL, **Manyonda IT**. Outcomes after total versus subtotal abdominal hysterectomy. *N Engl J Med* 2002;347:1318-1325.

[Impact Factor 34.833]

2. Page NM, Woods RJ, Gardiner SM, Lomthiasong K, Butlin DJ, **Manyonda IT**, Lowry PJ. Excessive secretion of neurokinin B by the placenta during the third trimester causes the clinical syndrome of pre-eclampsia. *Nature* 2000;405:797-800.

[Impact Factor 27.955]

3. Ugwumadu AHN, **Manyonda IT**, Reid F, Hay PE. Effect of early oral clindamycin on late miscarriage and preterm delivery in asymptomatic women with abnormal vaginal flora and bacterial vaginosis: a randomized controlled trial. *Lancet*, 2003;361:983-88.

[Impact Factor 21.713]

4. Page NM, Bell NJ, Gardiner SM, **Manyonda IT**, Brayley KJ, Strange PG, Lowry PJ. Characterization of the endokinins: Human tachykinins with cardiovascular activity. *Proceedings of the National Academy of Sciences*, 2003;100:6245-6250.

[Impact Factor 10.452]

5. Thakar RB, Ayers S, Srivastava R, **Manyonda I**. Removing the cervix at hysterectomy- An unnecessary intervention? *Obstetrics & Gynaecology* 2008;112:1262-9.

[Impact Factor 4.282]

6. Ugwumadu AHN, Reid F, Hay PE, **Manyonda IT**, Jeffrey I. Oral clindamycin and histologic chorioamnionitis in women with abnormal vaginal flora. *Obstetrics & Gynaecology* 2006;107:863-8.
[Impact Factor 4.282]

7. Ugwumadu AHN, Reid F, Hay PE, **Manyonda IT**. Natural history of bacterial vaginosis and intermediate flora in pregnancy and effect of oral clindamycin. *Obstetrics & Gynaecology* 2004, 104:114-119.
[Impact Factor 4.170]

8. Lovell TM, Woods RJ, Butlin DJ, Brayley KJ, **Manyonda IT** et al. Identification of a novel mammalian post-translational modification, phosphocholine, on placental secretory polypeptides. *J Mol Endocrinol.* 2000, 39:189-98.
[Impact Factor 3.649]

9. Hassan KM, **Manyonda IT**, Ng FU, Singer DRJ, Antonios TFT. Skin capillary density changes in normal pregnancy and pre-eclampsia. *Journal of Hypertension*, 2002;20:2439-2443.
[Impact Factor 3.572]

10. Banu NS, Gaze DC, Bruce H, Collinson P, Belli A-M, **Manyonda IT**. Markers of muscle ischaemia, necrosis and inflammation following uterine artery embolisation in the treatment of symptomatic uterine fibroids. *American Journal Obstetrics & Gynaecology* 2007;196 :213-5
[Impact Factor 2.805]

3. Summary of Grant Income

| | | |
|-------------|---|----------------------|
| 2007 | Health Technology Assessment (NIHR). [Co-applicant] | £1,200,000-00 |
| | To investigate the role of exercise in smoking cessation in pregnancy. | |
| 2005 | British Heart Foundation [Co-PA] | £127,000-00 |
| | To investigate the role of capillary density in pre-eclampsia | |
| 2004 | St George's Hospital Medical Research Committee [Co-PA] | £5,000-00 |
| | Capillary microcirculation studies in normal and hypertensive pregnancy, and in newborns with intrauterine growth restriction, or born to mothers with hypertensive disorders. A Pilot Study. | |
| 2003 | St George's Hospital Medical Research Committee [Co-PA] | £4,000-00 |
| | Effect of antioxidants (ascorbate and N-acetyl cysteine) on markers of bone resorption and antioxidant status in healthy postmenopausal women: <i>A Pilot Study</i> . | |
| 1997 | Wellcome Trust [Co-PA] | £146,000-00 |
| | To investigate trophoblast cell motility | |
| 1995 | NHS R & D [Principal Applicant] | £115,000-00 |
| | Total v subtotal hysterectomy: impact on urinary, bowel and sexual function. | |
| 1995 | NHS R & D | £110,000-00 |

| | | |
|-------------|--|-------------------|
| | [Co-PA] Impact of bacterial vaginosis on early pregnancy loss and preterm labour. | |
| 1995 | Birthright [Principal Applicant] To investigate cytokine regulation of human trophoblastic invasion. | £70,000-00 |
| 1994 | Sir Jules Thorn Charitable Trust: [Principal Applicant] To investigate the role of adhesion molecules in human trophoblastic invasion. | £71,300-00 |
| 1993 | SWT-RHA Research & Development Grant [Principal Applicant] To investigate the genetic susceptibility to cervical cancer. | £58,292-00 |
| 1991 | Locally Organised Research Scheme Grant [Principal Applicant] To develop a non-invasive prenatal diagnostic technique based on the production of monoclonal antibodies to trophoblast, and extraction of trophoblast cells from peripheral blood using immunomagnetic beads. | £50,000-00 |
| 1991 | St George's Hospital Medical Research Committee [Principal Applicant] To investigate endometrial factors that regulate trophoblastic invasion. | £25,000-00 |
| 1990 | Nichols Fellowship: Royal Society of Medicine [Principal Applicant] To supplement MRC grant below. | £500-00 |
| 1990 | Mason Medical Research Grant [Principal Applicant] To supplement MRC grant below. | £2,500-00 |

- | | | |
|-------------|--|-------------------|
| 1989 | Pilot Study Grant: Ciba-Geigy. [Principal Applicant] Studies into the immunomodulatory effects of sex steroids given as hormone replacement therapy. | £2,500-00 |
| 1988 | MRC-UK Training Fellowship [Principal Applicant] Studies into allo-MHC materno-fetal interactions using limiting dilution analysis. | £75,000-00 |
| 1988 | Katharine Bishop Harman Award [Principal Applicant] Preliminary feasibility studies into the vertical transmission of HIV | £500-00 |
| 1981 | Association of C/wealth Universities Award [Principal Applicant] Elective studies at the University of the West Indies, Jamaica. | £500-00 |

3. Summary of supervision of research students

I have supervised (as Principal) the following:

Dr Mei Choy – she joined my research group as a Research Assistant, converting to a PhD student. Her main area of research was human trophoblastic invasion. She successfully defended her PhD thesis in 1998. Several papers were published from this work. The most significant innovation was the demonstration that human extravillous trophoblasts exhibit phagocytic activity, which may be part of the mechanism of trophoblastic invasion. Dr Choy currently works as a post-doctoral Research Scientist at the Chinese University in Hong Kong. [Co-supervisor: Professor Catherine Wilson].

Dr Raneek Thakar – she joined my research group as a Clinical Research Fellow to work on the project comparing total to subtotal hysterectomy in terms of bladder, bowel and sexual function, as well as quality of life and complications rates. A major paper from this work was published in the New England Journal of Medicine in October 2002. Dr Thakar successfully defended her MD thesis by viva in June 2003. Additional papers have been published. Dr Thakar is now a consultant at the Mayday Hospital, and we have continued our collaboration: we recently completed a ten-year follow-up of the women recruited to the original trial. We have received 3 prizes at international meetings for the latter work, and a paper has just been published in the journal Obstetrics and Gynecology (Bibliography reference no. 2). [Co-supervisor: Mr Peter Clarkeson, Mayday University Hospital].

Dr Austin Ugwumadu – he joined my research group as a Clinical Research Fellow to work on a project assessing the impact of early screening and treatment (with oral clindamycin) of abnormal vaginal flora and bacterial vaginosis on late miscarriage and preterm labour. The key findings were published in the Lancet in April 2003, but several other papers have been published – see Bibliography. Dr Ugwumadu was awarded his PhD degree in 2006. [Co-supervisor: Dr Phillip Hay, St George's, Genito-Urinary Medicine].

BSc Medical Students – over the years I have supervised research projects by medical students undertaking intercalated BSc degrees, especially those involving research projects in Immunology. At least two of the students I supervised were awarded 1st class degrees.

Dr Nasser Banu - she joined my group in 2004 to work on the prospective clinical trial of uterine artery embolisation versus myomectomy in the treatment of symptomatic uterine fibroids. Due to personal difficulties she was not able to complete work which was intended to lead to an MD thesis.

Dr Vivek Nama – he joined my research group as a Clinical Research Fellow in 2006 to work on a project assessing the role of capillary density in the development of Pre-eclampsia. He completed in programme of research in September 2008 and is now writing papers as well as a thesis towards an MD degree.

[Co-supervisor: Dr Tarek Antonios, St George's, Clinical Pharmacology].

Dr Rohan D'Souza – he joined my research group as a Clinical Research Fellow in 2006 to work on a project assessing capillary density in neonates born from pregnancies complicated by a variety of disorders especially hypertensive disorders and unexplained intrauterine growth restriction. The research is on-going on a part-time basis, and should be completed within the next two years, when it is intended that Dr D'Souza will submit a thesis for a PhD degree.

[Co-supervisor: Dr Tarek Antonios, St George's, Clinical Pharmacology].

Dr Vikram Talaulikar – he is due to join my research group in January 2009 as a Clinical Research Fellow to work on a project assessing the role of cytokines and natural killer cells in recurrent spontaneous miscarriage.

[Co-supervisor: Mr Hassan Shehata, St Helier's Hospital].

Miss Jasmine Tham – she is a visiting undergraduate student from a university in Singapore who joined me in mid-January 2009 for a period of 6 months to undertake a research project towards the completion of her BSc degree in Biomedical Sciences.

4. Research / Academic Accolades:

Personal Prizes / Outstanding Achievements

- 1979 1st Class (Hons) BSc. Medical Sciences with Immunology
- 1979 Pollock Prize (Top student BSc Examinations)
- 1981 Elek Prize (Immunology Open Essay Competition)
- 1990 Best Paper Prize. RSM, O & G Section, Registrars' Conference.
- 1990 Robert Greenblatt Prize. Sixth International Congress on the Menopause.

Prizes awarded to research fellows under my supervision

Research fellows under my supervision have presented our work at various scientific meetings and were awarded prizes as follows:

Dr Raneer Thakar

24.10.2008. Thakar R, Ayres S, Srivastava R, **Manyonda I**. Removing the cervix at hysterectomy: an unnecessary intervention? 38th Annual Meeting of the International Continence Society, Cairo, Egypt.

Best Clinical Abstract

17.09.08. Thakar R, Ayres S, Srivastava R, **Manyonda I**. Removing the cervix at hysterectomy: an unnecessary intervention? 33rd Annual Meeting of the International Urogynecological Association, Taipei.

Axel Ingelman-Sundberg Award for the Best abstract presentation

21.02.08. Thakar R, Ayres S, Srivastava R, **Manyonda I**. Long term outcome after total and subtotal hysterectomy. Update on imaging and management of pelvic floor disorders, Treviso.

Bjorn Fortling Award for the Best original work

16.02.2001. Thakar R, **Manyonda IT**, Stanton SL, Clarkson PK, Robinson G. A randomised study of total and subtotal hysterectomy: Effect on bladder and bowel function. Royal Society of Medicine, Registrars prize meeting.

Best oral presentation.

24.10.2000. Thakar R, **Manyonda IT**, Stanton SL, Clarkson PK, Robinson G. A randomised study of total and subtotal hysterectomy: Effect on bladder and bowel function. 25th Annual Meeting of the International Urogynecological Association, Rome.

Best oral presentation.

06.10.2000. Thakar R, **Manyonda IT**, Stanton SL, Clarkson PK, Robinson G. Effect of hysterectomy on on bladder and bowel function. SW Thames Regional Registrars Meeting, Crawley.

Best oral presentation.

14.04.1999. Thakar R, **Manyonda IT**, Stanton SL, Clarkson PK, Robinson G. Total versus subtotal hysterectomy: What is the evidence? Evidence Based Medicine Meeting, RCOG, London.

Best oral presentation.

Dr Austin Ugwumadu

- **Best Research Paper Prize [Euro 1000]**. 8th International Conference on Infection and Immunology in Obstetrics and Gynaecology. Rome, November 2003. Oral clindamycin and histologic chorioamnionitis in women with abnormal vaginal flora.
- **Second Prize** - South Thames (West) Specialist Registrar Study day Crawley Hospital, Crawley, November 27, 2000. "The influence of bacterial vaginosis on early pregnancy: failure of treatment effect in later pregnancy"
- **Second Prize** - The Royal Society of Medicine, Section of Obstetrics & Gynaecology ~ Annual Registrar Prize Meeting, March 30, 1999 London. "The impact of unprotected sexual intercourse and pregnancy on bacterial vaginosis" (£100.00 and certificate)
- **First Prize** - South Thames (West) Specialist Registrar Study day Mayday University Hospital, Croydon, London November 27, 1998. "Forget antibiotics, the treatment for bacterial vaginosis is unprotected sexual intercourse and pregnancy!!" (£100.00 and winner's shield)
- **First Prize** - South Thames (West) Specialist Registrar Study day St. Richard's Hospital, Chichester, February 13, 1998. "The potential role of endometrial prolactin in recurrent miscarriages ~ Preliminary findings" (£100.00 book tokens and winner's shield)

Editorships: Journal;

MCQs Editor, Best Parctice & Research Clinical Obstetrics and Gynaecology.

2002 – 2005.

Editorial Board, Best Practice & Research Clinical Obstetrics and Gynaecology.
2002 -.

Outline of planned Research Programme & Collaborations for next 5 years

1. **Physical activity as an aid to smoking cessation in pregnancy:** a collaboration with Dr Michael Usher (Psychology) and others.
 - The research programme is funded by NIHR (HTA - £1.2m). We are in the process of establishing the collaborative centers and appointing midwives who will conduct the day-to-day recruitment and supervision of the women participating in the study. This is a four year programme of research.

2. **Capillary density studies in normal and abnormal pregnancy:** an ongoing collaboration with Dr Tarek Antonios, Department of Clinical Pharmacology:
 - To continue our studies on capillary density in pre-eclampsia and in neonates born prematurely and/or growth restricted and/or to mothers with pre-existing medical disorders such as essential hypertension and diabetes. Fundamentally we wish to unravel the potential role of the microcirculation in diseases related to pregnancy, and also assess whether the lesions leading to the disease processes might be laid down during the intra-uterine existence (the “fetal origins of adult disease” concept).

3. **Uterine artery embolization versus myomectomy in the treatment of symptomatic fibroid disease:** a collaboration with Professor Klim McPherson (Oxford) / Professor Mary-Ann Lumsden (Glasgow) / Professor Jon Moss (Glasgow) / Dr Stephen Kennedy (Oxford) / and Professor Anna-Maria Belli (St George’s):
 - To submit a major grant application (£2.5m) to NIHR-HTA to fund a national programme of research that will compare outcomes of uterine artery embolization versus myomectomy in women with fibroid disease. We submitted the preliminary application and have been invited to submit the full application. Professor Anna-Maria Belli and I conducted the pilot studies that form the backbone of this application. St George’s, with its unique and over-subscribed Myoma Clinic, which I established 4 years ago, will be the leading recruitment centre. If we secure the funding this will be a 5 year programme of research.

4. **General anaesthesia versus Combined spinal and epidural anaesthesia for abdominal hysterectomy:** a collaboration with Dr Patrick Wong (Anaesthesiology, St George's) and Dr Raneer Thakar (Gynaecology, the Mayday Hospital):
 - To submit an application to the NIHR for funding to research on optimal anaesthesia for abdominal hysterectomy, the commonest major gynaecological operation. We are currently seeking ethical approval for the work.

5. **Cytokines and NK cells in recurrent spontaneous miscarriage:** a collaboration with Dr Jo Sheldon (St George's, Immunology) / Dr Amolak Bansal (St Helier's, Immunology) and Mr Hassan Shehata (St Helier's, Obstetrics):
 - To set up basic science research utilising micro-array technology to study the role of cytokines and NK cells in recurrent spontaneous miscarriage We have identified a Clinical Research Fellow (Dr Vikram Tilauliker) who should be taking up his post in mid-January 2009.

6. **International research collaborations:** with the Asian Research and Training Institute for Skill Transfer (ARTIST), of which I am the Scientific Director.
 - I have been instrumental in developing research programmes in areas of particular relevance to obstetrics in India as follows: gestational diabetes and iron deficiency anemia in pregnancy. The disease burden is huge, and there are untapped human as well as funding resources, and several projects are already up and running.

7. **Re-establishment of laboratory-based research:**
 - To lay the foundations for the re-establishment of laboratory based research, specifically to study the mechanism of human trophoblast invasion. This will involve initial collaborations with active scientists at St George's and at Kingston University, but ultimately I plan to secure funding to re-establish a laboratory-based research team. This will also require that I scale down on my current level of clinical activity (12 PA Job Plan).

Collaboration - Dr Nigel Page (Kingston University): I previously collaborated with Dr Page when he was a post-doctoral fellow to Professor Lowry at Reading University (seminal papers were published in Nature and PNAS). Dr Page is now Senior Lecturer at Kingston University and we have agreed to resurrect our collaboration. Our area of mutual interest remains early pregnancy events.

D.

FULL BIBLIOGRAPHY

Publications – Books

Manyonda IT. **Uterine Fibroids**. Best Practice & Research Clinical Obstetrics & Gynaecology 2008; 22(4).

Manyonda IT. **Immunology of Human Reproduction**. 2006.

Thakar RB, Manyonda IT. **Hysterectomy**. Best Practice & Research Clinical Obstetrics & Gynaecology 2005; 19(3).

Manyonda IT. **Comprehensive Revision Guide for the Part II MRCOG Examination**. In Press. Due for publication 2009.

Publications: Original Research

1. Ussher M, Aveyard P, Coleman T, Straus L, West R, Marcus B, Lewis B, **Manyonda I**. Physical activity as an aid to smoking cessation during pregnancy: two feasibility studies. **In Press**: BioMed Central Public Health.
2. Thakar RB, Ayers S, Srivastava R, **Manyonda I**. Removing the cervix at hysterectomy- An unnecessary intervention? *Obstetrics & Gynaecology* 2008;112:1262-9.
3. Banu NS, Gaze DC, Bruce H, Collinson P, Belli A-M, **Manyonda IT**. Markers of muscle ischaemia, necrosis and inflammation following uterine artery embolisation in the treatment of symptomatic uterine fibroids. *American Journal Obstetrics & Gynaecology* 2007;196:213-5.
4. Ugwumadu AHN, Reid F, Hay PE, **Manyonda IT**, Jeffrey I. Oral clindamycin and histologic chorioamnionitis in women with abnormal vaginal flora. *Obstetrics & Gynaecology*, 2006;107(4):863-868.
5. Barker KT, Spendlove HE, Banu NS, Bridge JA, Fisher C, Shipley J, Garrett M,

- Manyonda I**, Houlston RS. No evidence for epigenetic inactivation of fumarate hydratase in leiomyomas and leiomyosarcomas. *Cancer Letters*, 7 June., 2005.
6. Barrett G, Peacock J, Victor C, **Manyonda I**. Caesarean section and postnatal sexual health. *BIRTH*, 2005;32.4:306-311.
 7. Ayers S, Collenette A, Hollis B, **Manyonda I**. Feasibility study of a Latest Date of Delivery (LDD) system of managing pregnancy. *Journal of Psychosomatic Obstetrics and Gynaecology*, 2005;26(3):167-171.
 8. Chua GC, Wilsher M, Young MP, **Manyonda I**, Morgan R, Belli A-M. Comparison of particle penetration with non-spherical polyvinyl alcohol versus trisacryl gelatin microspheres in women undergoing premyomectomy uterine artery embolisation. *Clinical Radiology* 2005, 60:116-22.
 9. Thakar R, Ayers S, Georgakapolou A, Clarkson P, Stanton S, **Manyonda I**. Hysterectomy improves quality of life and decreases psychiatric symptoms: a prospective and randomised comparison of total versus subtotal hysterectomy. *BJOG* 2004, 111:1115-1120.
 10. Ngeh N, Belli A-M, Morgan R, **Manyonda I**. Pre-myomectomy uterine artery embolisation minimises operative blood. *BJOG* 2004,111:1139-40.
 11. Khare M, Sharland M, **Manyonda I**, Rice P, Bland M, Griffiths P. Use of serial maternal urine cytomegalovirus PCR to detect primary CMV infection in sero-negative pregnant women. *Journal of Virological Methods*, 2004, 119(1):31-35.
 12. Ugwumadu AHN, Reid F, Hay PE, **Manyonda IT**. Natural history of bacterial vaginosis and intermediate flora in pregnancy and effect of oral clindamycin. *Obstetrics & Gynaecology* 2004, **104**:114-119.
 13. Moroff D, Barrett G, Peacock J, Victor C, **Manyonda I**. Postnatal depression and sexual health after childbirth. *Obstetrics & Gynaecology* 2003;102:1318-25.
 14. Page NM, Bell NJ, Gardiner SM, **Manyonda IT**, Brayley KJ, Strange PG, Lowry PJ. Characterization of the endokinins: Human tachykinins with cardiovascular activity. **Proceedings of the National Academy of Sciences**, 2003;100:6245-6250.
 15. Ugwumadu AHN, **Manyonda IT**, Reid F, Hay PE. Effect of early oral clindamycin on late miscarriage and preterm delivery in asymptomatic women with abnormal vaginal flora and bacterial vaginosis: a randomized controlled trial. **Lancet**, 2003;361:983-88.
 16. Thakar RB, Ayers S, Clarkeson P, Stanton SL, **Manyonda IT**. Outcomes after total versus subtotal abdominal hysterectomy. **N Engl J Med** 2002;347:1318-1325.

17. Hassan KM, **Manyonda IT**, Ng FU, Singer DRJ, Antonios TFT. Skin capillary density changes in normal pregnancy and pre-eclampsia. **Journal of Hypertension**, 2002;20:2439-2443.
18. Page NM, Woods RJ, Gardiner SM, Lomthiasong K, Butlin DJ, **Manyonda IT**, Lowry PJ. Excessive secretion of neurokinin B by the placenta during the third trimester causes the clinical syndrome of pre-eclampsia. **Nature** 2000;405:797-800.
19. Lovell TM, Woods RJ, Butlin DJ, Brayley KJ, **Manyonda IT** et al Identification of a novel mammalian post-translational modification, phosphocholine, on placental secretory polypeptides. *J Mol Endocrinol*. 2000, 39:189-98.
20. Page N, Butlin D, **Manyonda I**, Lowry P: The development of a genetic profile of placental gene expression during the first trimester of pregnancy: A potential tool for identifying novel secreted markers. *Fetal Diagn Ther* 2000;15:237-245.
21. Choy MY, Whitley G ST.J, **Manyonda IT**. Efficient, rapid and reliable establishment of human trophoblast cell lines using poly-L-ornithine. *Early Pregnancy: Biology and Medicine*, 2000; IV (2):124-143.).
22. Barrett G, Pendry E, Peacock J, Victor C, Thakar R, **Manyonda IT**. Women's sexual health after childbirth. *British Journal of Obstetrics & Gynaecology*, 2000;107(2):186-195.
23. Bull H, Choy M, **Manyonda I**, Brown CA, Waldron EE, Holmes SD, Booth JC and Nelson PN (1999) Reactivity and assay restriction profiles of monoclonal and polyclonal antibodies to acid phosphatases: A preliminary study. *Immunology Letters* 70:143-149.
24. **Manyonda IT**, Choy MY. Collagen phagocytosis by human extravillous trophoblast: potential role in trophoblastic invasion. *J Soc Gynecol Invest* 1999;6:158-66.
25. Barrett G, Pendry E, Peacock J, Victor C, Thakar R, **Manyonda I**. Women's sexuality after childbirth: a pilot study. *Archives of Sexual Behaviour* 1999;28:179-191.
26. Choy MY, **Manyonda IT**. The phagocytic activity of human first trimester extravillous trophoblast. *Human Reproduction* 1998;**13**(10):2941-2949.
27. **Manyonda IT**, Slater DM, Fenske C, Hole D, Choy MY, Wilson CA. A role for noradrenaline in pre- eclampsia: towards a unifying hypothesis for the pathophysiology. *Br J Obstet Gynaecol* 1998;**105**:641-648.
28. **Manyonda IT**, Choy MY. Modelling human trophoblastic invasion *in-vitro*. *Contemp. Rev. Obstet. Gynaecol.*, 1994;6:5-12.
29. Thakar R, **Manyonda IT**, Robinson G, Clarkson P, Stanton SL. Total versus subtotal

hysterectomy: a survey of current views and practice among British gynaecologists. *Journal of Obstetrics and Gynaecology*, 1998;18(3):267-269.

30. Oyelese KO, Hussain S, Shehata H, **Manyonda IT**. Toward the modern management of ectopic pregnancy: A complete audit cycle of practice in a London Teaching Hospital. *J Obstet Gynaecol* May 1999.
31. Oyelese KO, Turner M, Ikomi A, Ville Y, **Manyonda IT**. Delivery through an undiagnosed major placenta praevia: good outcome for mother and baby. *Journal of Obstetrics and Gynaecology*, 1998;18(4):385-386.
32. Ahsan S, **Manyonda IT**, Spencer T, Ratcliffe N. Psammoma bodies in a cervical smear in association with borderline ovarian epithelial malignancy. *Journal of the Pakistan Medical Association*, 1998;48(2):52-53.
33. Shehata HA, Ali MM, Evans-Jones JC, Upton GJG, **Manyonda IT**. Red cell distribution width (RDW) changes in pregnancy. *International Journal of Gynecology & Obstetrics*, 1998;62:43-46.
34. Knapp ML, **Manyonda IT**, Attwell ME, Baxter MA. Clinically significant interference by haemoglobin F during pregnancy with the measurement of glycated haemoglobin using the Corning agar electroendosmotic technique. *Annals of Clinical Biochemistry*, 1996;33:151-153.
35. Rich A, **Manyonda IT**, Patel R, Amias AG. A comparison of the efficacy of Danazol, Cyproterone Acetate, Medroxyprogesterone Acetate and Norethisterone in the preparation of the endometrium for ablation/resection: a pilot study. *Gynaecological Endoscopy*, 1995;4:59-61.
36. Palacio J, Souberbielle BE, Shattock RJ, Robinson G, **Manyonda IT**, Griffin G. In vitro HIV-1 infection of human cervical tissue. *Research in Virology*, 1994;145:155-161.
37. **Manyonda IT**, Baggish MS, Bower SJ, Stanton SL. Combined laparoscopic and micro-laparotomy removal of benign cystic teratomata: a new technique. *British J of Obstetrics & Gynaecology* 1993, **100**:284-286.
38. **Manyonda IT**, Pereira RS, Pearce JM, Sharrock CEM. Limiting dilution analysis of the allo-MHC anti-paternal cytotoxic T cell response. I: normal primigravid and multiparous pregnancies. *Clinical and Experimental Immunology*, 1993;93(1):126-131.
39. **Manyonda IT**, Pereira RS, Pearce JM, Sharrock CEM. Limiting dilution analysis of the allo-MHC anti-paternal cytotoxic T cell response. II: recurrent spontaneous abortion and the effect of immunotherapy. *Clinical and Experimental Immunology*, 1993;93(1):132-137.

40. **Manyonda IT**, Pereira RS, Brincat M, Varma TR. The effect of 17 beta-oestradiol on lymphocyte subsets, delayed cutaneous hypersensitivity responses and mixed lymphocyte reactions of menopausal women. *Maturitas*, 1992, **14**:201-210.
41. **Manyonda IT**, Soltys AJ, Hay FC. A critical evaluation of the magnetic cell sorter and its use in the positive and negative selection of CD45RO+ cells. *J. Immunological Methods*, 1992;**149**:1-10.
42. **Manyonda IT**, Shaw DE, Drife JO. The effect of delayed pushing in labour with continuous lumbar epidural analgesia. *Acta Obstetrica et Gynecologica Scandinavica* 1990;**69**:291-295.
43. **Manyonda IT**, Welch CR, McWhinney NA, Ross LD. The influence of suture material on vaginal vault granulations following abdominal hysterectomy. *British Journal of Obstetrics and Gynaecology* 1990;**97**:608-612.
44. **Manyonda IT**, Shaw DE, Foulkes A, Osborn DE. Renal cell carcinoma : blood transfusion and survival. *British Medical Journal* (1986),**293**:537.

Publications - Review Articles

45. Nama V, **Manyonda I**. Tubal ectopic pregnancy: diagnosis and management. *Arch Gynecol Obstet* 2009, **279**(4): 443.
46. **Manyonda I**, Gorti M. Costing magnetic resonance-guided focused ultrasound surgery, a new treatment for symptomatic fibroids. *Commentary. BJOG* 2008; **115**:551-3.
47. Gupta S, Jose J, **Manyonda IT**. Clinical presentation of fibroids. *Best Practice & Research Clinical Obstetrics & Gynaecology* 2008; **22**(4): 615-626.
48. Mukhopadhaya N, De Silva C, **Manyonda IT**. Conventional Myomectomy. *Best Practice & Research Clinical Obstetrics & Gynaecology* 2008; **22**(4): 677-705.
49. Sankaran S, **Manyonda IT**. Medical Management of Fibroids. *Best Practice & Research Clinical Obstetrics & Gynaecology* 2008; **22**(4): 655-676.
50. Gupta S, **Manyonda IT**. Hysterectomy for benign gynaecological diseases. *Current Obstetrics & Gynaecology* 2006; **16**: 147-53.
51. Banu NS, **Manyonda IT**. Alternative medical and surgical options to hysterectomy. *Best Practice & Research Clinical Obstetrics and Gynaecology*, 2005;**19** (3):431-449.
52. **Manyonda I**, Sinthamoney E, Belli A-M. Controversies and challenges in the modern management of uterine fibroids. *BJOG* 2004;**111**:95-102.

53. Banu N, **Manyonda IT**. Myometrial Tumours. *Current Obstetrics and Gynaecology*, 2004;14(5):327-336.
54. **Manyonda IT**. Hysterectomy for benign gynaecological disease. *Current Obstetrics & Gynaecology*, 2003;13(3):159-165.
55. **Manyonda IT**. Total or subtotal hysterectomy for benign gynaecological disease. *Reviews in Gynaecological Practice*, 2003;3(1):26-31.
56. Thakar R, **Manyonda IT**, Stanton SL, Clarkson PK & Robinson G. Hysterectomy and bowel function. *International Urogynaecology Journal and Pelvic Floor Dysfunction*, 2001;12(5):337-341.
57. Thakar R, **Manyonda IT**. Hysterectomy for benign disease – total versus subtotal. In “Progress in Obstetrics and Gynaecology” 2000 Vol. 14 p233- 243. Ed. Studd J. Churchill Livingstone.
58. Thakar R, **Manyonda IT**, & Robinson G. Does hysterectomy affect pelvic organ function? *British Journal of Sexual Medicine*, 1998;25(6)21-23.
59. Ugwumadu A, **Manyonda IT**. Managing bleeding in pregnancy. *The Practitioner* 1998;**242**:84-94
60. Thakar R, Mollison J, **Manyonda IT**. Total versus subtotal hysterectomy: the last great controversy in gynaecological surgery? *Contemporary Reviews in Obstetrics and Gynaecology*, 1998;1:61-66.
61. **Manyonda IT**. The Immune System (1998): in *Clinical Physiology in Obstetrics*. Ed GVP Chamberlain and F Broughton Pipkin. Blackwell Science. Pp129-162. London, Paris, , New York.
62. Thakar R., **Manyonda I.T.**, Stanton S.L., Clarkson P.K. & Robinson G. The Effect of Hysterectomy on Urinary and Bowel and Sexual Function. *British Journal of Obstetrics & Gynaecology* 1997; 104: 983-987.
63. **Manyonda IT**, Ugwumadu AHN. Recurrent spontaneous miscarriage - current trends and management. *Contemporary Reviews in Obstetrics and Gynaecology*, 1996, **8**: 217-222.
64. **Manyonda IT**. Advantages of endometrial ablation compared with hysterectomy. *General Practitioner*, April 7 1995; p62.
65. **Manyonda IT**. Should hysterectomy always involve removal of cervix? *Pulse*, 1995;**55** (18):86.

66. **Manyonda IT**, Choy M. Modeling implantation and trophoblastic invasion in vitro. *Contemporary Reviews in Obstetrics and Gynaecology*, 1994; **6**:5-12.
67. **Manyonda IT**, Kabukoba JJ. Editorial: Why anonymous? *The Lancet* 1993;**341**:1059-1060.
68. **Manyonda IT**. Gynaecological Endoscopic Surgery, 16th - 17th March 1993: Conference Report. *British Journal of Obstetrics and Gynaecology*, 1993;**100**:856-858.
69. **Manyonda IT**, Pereira RS. Prenatal diagnosis from fetal cells in the maternal circulation. *Contemporary Reviews in Obstetrics & Gynaecology*, 1992, **4**:5-11.
70. **Manyonda IT**. Managing pre-existing disease in pregnancy. *Pulse*, 1992, **52**:79-88.
71. **Manyonda IT**, Varma TR. The advent of minimally invasive procedures in gynaecological surgery. *Maternal and Child Health*, 1991; **16**:320-324.
72. **Manyonda IT**. Modern management of recurrent spontaneous miscarriage. *Pulse*, 1991, **51**:60-65.

Publications – Chapters in books

73. **Manyonda IT**, Hadoura E. Total abdominal hysterectomy. In O’ Donovan PJ & Miller CE (eds). *Modern Management of Abnormal Uterine Bleeding*. 1st edn. London: Informa Healthcare, 2008, pp. 267-279.
74. Gupta S, **Manyonda IT**. Analysis of sexual activity after hysterectomy. In O’ Donovan PJ & Miller CE (eds). *Modern Management of Abnormal Uterine Bleeding*. 1st edn. London: Informa Healthcare, 2008, pp. 354-365.
75. Sinthamoney E, **Manyonda IT**. Management of Severe Pre-Eclampsia and Eclampsia. In Arulkumaran S, Penna LK, Bhasker Rao K (eds): “The Management of Labour” , Orient Longman Private Ltd (publ). 2005. pp381-404.
76. **Manyonda IT**. Subtotal abdominal hysterectomy. In “The Yearbook of Obstetrics and Gynaecology”, RCOG Press. Eds. Hillard T, Purdie D. Vol 11. 2004. pp328 - 339.
77. **Manyonda IT**. Immunology. In: De Swiet & Chamberlain (eds) : *Basic Science in Obstetrics and Gynaecology*, second edition, 1992. pp. 125-134. Churchill Livingstone, Edinburgh.

Publications - Case reports

78. Kalu E, Wayne C, Croucher C, Findley I, **Manyonda IT**. Triplet pregnancy in a Jehova's Witness: recombinant human erythropoietin and iron supplementation for minimizing the risk of excessive blood loss. *BJOG*, 2002;**109**:723-725.
79. Oyelese Y, Ikomi A, **Manyonda I**. Third consecutive complete posterior uterine rupture. A case report. *J Reprod Med* 2001 Jul; 46:694-6.
80. Oyelese KO, Turner M, Ikomi A, Ville Y, **Manyonda IT**. Delivery through an undiagnosed major placenta praevia: Good outcome for mother and baby . *J Obstet Gynaecol* 1998;18:385.
81. Ahsan S, **Manyonda IT**, Spencer TS, Ratcliffe N. Psammoma bodies in a cervical smear in association with borderline ovarian epithelial malignancy. *J Pak Med Assoc* 1998 Feb; 48:52-3.
82. Holden D, Vere M, **Manyonda IT**. Vesico-uterine fistula occurring in a woman with a previous caesarean section and two subsequent normal vaginal deliveries. *British Journal of Obstetrics and Gynaecology*, 1994;**101**:354-356.
83. Joels LA, **Manyonda IT**. Chronic faecal impaction impairing vaginal delivery at term and first trimester termination of pregnancy. *British Journal of Obstetrics and Gynaecology*, 1994;**101**:168-169.
84. Penna L, **Manyonda IT**, Amias AG. Intra-abdominal miliary tuberculosis presenting as disseminated ovarian carcinoma with ascites and raised CA125. *British Journal of Obstetrics and Gynaecology*, 1993;**100**:1051-1053.
85. Joels LA, Karanjia N, **Manyonda IT**. Caecal carcinoma masquerading as pelvic inflammatory disease. *Journal of Obstetrics and Gynaecology*, 1992;**12**:279-280.
86. **Manyonda IT**, Varma TR. Massive obstetric haemorrhage due to placenta praevia/accreta with prior caesarean section. 3 Case reports and review. *International J of Obstetrics and Gynaecology*, 1990;**34**:183-186..
87. **Manyonda IT**, Neale EJ, Flynn JT, Osborn DE. Obstructive uropathy from endometriosis after hysterectomy and oophorectomy; two case reports. *European Journal of Obstetrics & Gynaecology and Reproductive Biology*, 1989; **31**:195-198.

88. Nama V, D'Souza R, **Manyonda I**, Antonios T. Configuration of the microcirculation in pre-eclamptic pregnancy: possible role of the venular system. *J Hypertens*. 2007 Dec;25(12):2512.
89. Nama V, Desilva C, **Manyonda I**. Association between lactate in vaginal fluids and time to spontaneous onset of labour in women with suspected prelabour rupture of membranes. *BJOG* 2007 May; 114(5):652-653.
90. Mukhopadhaya N, **Manyonda I**. The advent of international 'mail order' oocyte donation. *BJOG* 2007 April;114(4):510.
91. Gupta S, **Manyonda IT**. Re: Are mediolateral episiotomies actually mediolateral? *BJOG* 2006; 113:245
92. Gupta S, **Manyonda IT**. Re: Which career first? *BMJ* 2005; 331: 588-589
93. Barrett G, Peacock JL, Morof D, **Manyonda I**. Measuring pregnancy planning. *BIRTH*, 2005;32.4:331.
94. Banu N, **Manyonda IT**. Reducing blood loss at open myomectomy using triple tourniquet: a randomized controlled trial. *BJOG*, 2005;112:1582.
95. Gupta S, **Manyonda IT**. Which career first? *BMJ* 2005;331: on-line publication.
96. **Manyonda IT**, Thakar RB, Ayers S. Randomised controlled trial of total compared with subtotal hysterectomy with one-year follow-up results. *BJOG*, 2004;111:760.
97. **Manyonda IT**, Sinthamoney E, Lotfallah H, Belli A-M. Uterine artery embolisation for symptomatic fibroids: clinical results in 400 women with imaging follow up. *BJOG* 2003;110:1139.
98. Ugwumadu AHN, **Manyonda I**, Reid F, Hay PE. Effect of oral clindamycin on late miscarriage and preterm delivery. *Lancet*, 21 June 2003;361.
99. **Manyonda IT**, Thakar RB, Ayers SJ. Outcomes after Total versus Subtotal Abdominal Hysterectomy. *New England Journal of Medicine*, 2003;348:856-857.
100. **Manyonda IT**, Whitley GS. Trophoblast cell lines: a response to the Workshop Report by King et al. *Placenta* 2001 Feb-Mar;22:262-3.
101. **Manyonda IT**, Pereira RS. The modern preventive treatment of recurrent miscarriage. *British Journal of Obstetrics and Gynaecology*, 1996;103:723.
102. Ugwumadu AHN, Thakar RB, **Manyonda IT**. An analysis of recent trends in vacuum extraction and forceps delivery in the united Kingdom. *British Journal of Obstetrics and Gynaecology*, 1996; 103:937-938.

103. Ugwumadu A, **Manyonda IT**, Hay PE. Chorioamnionitis due to *Pseudomonas aeruginosa*: a complication of prolonged antibiotic therapy for premature rupture of membranes. *British Journal of Obstetrics and Gynaecology*, 1996;103:1054-1055.
104. Thakar RB, Ugwumadu AHN, **Manyonda IT**. A randomised prospective trial comparing laparoscopic and abdominal hysterectomy. *British Journal of Obstetrics and Gynaecology*, 1996;103:1171.
105. Farkas AG, **Manyonda IT**. The use of fax machines improves out of hours labour ward management. *Br J Obstet Gynaecol*, 1994;**101**:740-741.
106. **Manyonda IT**, Baggish MS, Stanton SL. Combined laparoscopic and micro-laparotomy removal of benign cystic teratomata: a new technique. *British Journal of Obstetrics & Gynaecology*, 1994;**101**:147-148.
107. Collins T, Bancroft K, **Manyonda IT**. Ampicillin and metronidazole treatment in preterm labour: a multicentre, randomised controlled trial. *British Journal of Obstetrics and Gynaecology*, 1994;**101**:
108. **Manyonda IT**, Kabukoba JJ. Guidelines for HIV: Health workers have rights too. *British Medical Journal*, 1993;**306**:1201-1202.
109. **Manyonda I**. The role of trophoblast dysfunction in the aetiology of miscarriage. *Br J Obstet Gynaecol* 1993 Oct; 100:969-70.
110. **Manyonda IT**, Pearce JM. A morphological and immunological study of human placental bed biopsies in miscarriage. *British Journal of Obstetrics and Gynaecology*, 1991, **98**:609-612.
111. **Manyonda IT**. Oxytocin infusion in primiparous women using epidural analgesia. *BMJ*, 1990;**300**:262.
112. **Manyonda IT**. Epidural anaesthesia in obstetrics. *BMJ*, 1989;**299**:1029.