# ADVANCED TRAINING AND RESEARCH IN FERTILITY MANAGEMENT UNIT

Professor Joseph Frederick, MBBS, DM (O&G), FRCOG, FACOG - Director

### WORK OF THE UNIT



Ongratulations to the ATRFMU for being the recipient of two awards at the Principal's Research Day Award Ceremony. Professor Joseph Frederick received the awards for the Most Outstanding Researcher in the Faculty of Medical Sciences in January 2005 and the Advanced Training and Research in Fertility Management Unit for The Assisted Conception (In Vitro Fertilization & Embryo Transfer) Project with Greatest Business/ Economic Impact.

Congratulations to Sister Claudette McKenzie who completed her Masters in Counselling in the first cohort of students from the

University of the West Indies. Sister Claudette McKenzie has been appointed President of the Association of the Operating Theatre Nurses for the next two years. Special mention must be made of Mrs. Lillith Williams, Miss Elaine Jackson, Mrs. Joan Meade, Mrs. Pansy Hamilton, Mrs. Jean Jackson and Mrs. Amy Lee for their efforts in the successful conduct of the four year programme towards the Masters in Counselling Distant Education programme. Plans are in the development phase in the setting up of an undergraduate course in Reproductive Health and Family Life Education Distant Education to include all the non-campus territories.

#### TRAINING

### The MSc Counselling Programme

The main focus during the Academic Year was the completion of the first programme cycle and the continued preparation for the commencement of the new cycle in September 2005.

# **Research Projects**

During the year students concentrated on culminating their programme of study with a three credit research project. Individual project proposals were fine-tuned during the July 2004 summer workshop and supervised research continued into semester one and the first half of semester two. Dr. Orville Shields, Mrs. Blossom White and Mrs. Pansy Hamilton played a leading role in guiding the research process. One hour of teleconference was held once per week on Thursdays to facilitate research tutorials across the Caribbean region. Case conferences and group therapy sessions as well as research supervision were also done on Thursdays. Three students applied for and were granted leave of absence from the programme during semester two while 8 students were given an extension to complete their research projects by the end of December 2005.

#### Tutors Workshop

Thirteen counselling tutors from nine Caribbean countries participated in the annual Tutors Workshop that was held in June, 2005 at Mona.

#### **Programme Sites**

Antigua and the British Virgin Islands have been added to the programme. Dr. Marty Fleischman in Antigua and Dr. Sylvia Simmonds in the B.V.I. will serve as counselling tutors/site coordinators.

#### Material Update

The programme curriculum and the Introduction to Individual Counselling (OG6OA) course manual were updated to meet the demands of the new Academic Year 2005-2006.

The Introduction to Group Counselling Manual is currently being updated.

### Applications

Two hundred and thirty-eight (238) new applications for the second cycle of the MSc Counselling Programme were received in July, 2005. Of these, some 182 applicants were selected by the Fertility Management Unit for entrance into the second cycle of the programme. Of these, seventy-three (73) accepted the offer and paid fees.

### **OUTREACH SECTION**

The work of the Outreach Section for the 2004-2005 period included Teaching, Research, Consultation and Collaboration within and outside of the University.

### HFLE - HIV/AIDS Project Implementation

"Promoting Healthy Life-Styles in Western Jamaica: HFLE - HIV/AIDS Project"

. • Held meetings with the Resident Tutor, School of Continuing Studies (SCS), Montego Bay and the Project Coordinator to plan activities for the Project

. • Conducted Health and Family Life Education curriculum planning workshop for Tutors of Sam Sharpe Teachers' College at Seacrest Beach Hotel, Priory, St. Ann November 12 -13, 2004

. • Conducted meetings with Principals and Teachers in two project schools and with community leaders in Granville and Catherine Hall, St. James to sensitize them to project activities

and garner their support

. • Conducted baseline study in the two project communities, Granville and Catherine Hall, St. James February 21 -25, 2005 in collaboration with the Research Section

. • Formally launched the project at a function at the School of Continuing Studies, Montego Bay, on May 12, 2005

• Had dialogue with possible collaborators

# **Undergraduate Teaching**

The Outreach Coordinator taught and examined a 3 credit course, SY21P: Reproductive Health and Family Life Education, in the Department of Sociology, Psychology, and Social Work during Semester 1, September – December 2004. Fifty-six students participated.

# MSc Counselling Programme

The Outreach Section collaborated with the Training Section in the delivery of the MSc Counselling Course as follows:

. • The Outreach Coordinator co-facilitated a workshop on "Supervising Research Papers" for Tutors in the Masters in Counselling Course, August 23 -26, 2004

. • The Outreach Coordinator examined 5 research papers for the MSc Counselling Course in May/June 2005

# **Consultation and Collaboration**

# UWI HARP/Institute of Education

. • The Outreach Consultant participated in the development of the UWI HARP/Institute of Education HIV/AIDS Manual for Teachers' Colleges

. • Both the Outreach Consultant and the Outreach Coordinator participated in a workshop to finalize the UWI HARP HIV/AIDS manual for use in Teachers' Colleges at Holiday Inn, Montego Bay March 29 -31, 2005

# UWI HARP

The Outreach Consultant continued to support activities of UWI HARP.

# CARICOM HFLE Project

. • The Outreach Consultant and the Outreach Coordinator participated in a Meeting of CARICOM HFLE Working Groups for Gender, Parenting and Community Outreach and Outof-School Youth August 19 -20, 2004 at the Le Meridian Jamaica Pegasus Hotel

. • The Outreach Consultant is a member of the UNICEF/CARICOM Steering Committee for the development of Curricula for Schools in Jamaica

### Ministry of Education HFLE Advisory Committee for the Formal Sector

The Outreach Consultant continued to participate in meetings of the Ministry of Education's HFLE Advisory Committee for the Formal Sector

### National Family Planning Board's HFLE Committee for the Non-formal Sector

Both the Outreach Consultant and the Outreach Coordinator attended planning meetings at the National Family Planning Board.

#### School of Continuing Studies

Both the Outreach Consultant and the Outreach Coordinator attended meetings convened by the Director of the UWI School of Continuing Studies to discuss the way forward for HFLE and HIV/AIDS education in the Region.

### Fogarty Fellowship

The Outreach Coordinator attended the Department of Psychiatry and Behavioural Sciences, Leonard Miller School of Medicine, University of Miami, June 6 – July 7, 2005 under a Fogarty International Training and Research Fellowship in the International Epidemiology of AIDS

# IN-VITRO FERTILIZATION LABORATORY

The Assisted Conception programme has continued to operate on what should be a fulltime basis. There has been a period where there has been a forced shutdown due to the embryo toxic use of Cidex. To address the problem there was to be a scheduled installation of a domed fume hood to ensure the removal of the toxic odour from the theatre area. The theatre nurses in the meantime employed a new working practice to reduce the Cidex exposure in the theatre until the part could be fitted. The laboratory also ordered and installed two air filter units to aid in cleaner air.

	August 2003 to July 2004	August 2004 to July 2005		August 2003 to July 2004	August 2004 to July 2005
IVF cycles	38	35	IVF	24%	20%
			Pregnancies		
ICSI cycles	27	41	ICSI pregnancies	22%	22%
IntraUterine	44	54		9%	15%
Insemination (IUI)			IUI Pregnancies		
Frozen Embryo Transfers (FET)	23	18	FET pregnancies	17%	11%
Embryo Freezing	19	23			
Semen Analysis	223	165			

The two main procedures are In Vitro Fertilisation (IVF) and IntraCytoplasmic Sperm Injection, (ICSI). These procedures would have been affected by the Cidex usage. Despite the setbacks there has been a 14% increase in the number of patients completing an IVF/ICSI cycle in comparison to the same period last year. The pregnancy rates quoted do not have age discrimination. The overall IVF pregnancy rate has deteriorated slightly to 20% since last year whilst the overall ICSI pregnancy rate has remained at 22%. There has been a significant rise in the number of completed Intrauterine Inseminations (IUI). There has also been a marked increase with the IUI pregnancy rate to 14%.

The number of patients having a frozen embryo transfer cycle dropped from last year as did the pregnancy rate. The number of patients that actually had freezing has increased from 19 to 23, an increase of 17%. The semen analysis workload has reduced to 165 patients for the current period in question. The delivery of our first triplet pregnancy (all girls) happened in May 2005.

The laboratory also has a reliable computer (that is networked to campus) and a colour printer. The colour printer is valued as it is being used for the output of not only patient reports but the new literature the laboratory is generating for the patients.

The IVF programme is now limited by staff availability and space. The ordering of more state of the art equipment for the laboratory has made evident the issue of space. This has forced the re-

organisation and limited modernisation of the laboratory. The new equipment includes a better (optically) microscope for ICSI to which a laser system may be attached. The advantage is twofold; new services (such as assisted hatching) can be offered to the patients and embryo research will be possible. The need exists for a third incubator after one of the original two incubators failed. Backup machinery was also purchased (such as the embryo freezing machine). There are still other items required by the laboratory and more importantly services that can be offered to the patients. The laboratory would like to move towards egg donation, embryo biopsy, blastocyst transfer and preimplantation genetic diagnosis (PGD).

September 2004 saw the introduction of our first junior embryologist, Miss Rochelle Foster. Miss Foster is trying to pursue an MPhil in Embryology. Miss Denise M. Everett is hoping to pursue a PhD in embryology whilst supervising and running the embryology laboratory. The laboratory was also responsible in the supervision and marking of a final year project for five University of Technology (UTECH) students who were interested in the IVF programme.

# **RESEARCH REPORT**

Tendered in collaboration with the Department of Obstetrics, Gynaecology and Child Health and was awarded a six month contract by Ministry of Health Jamaica under the EC/UNFPA Sexual and Reproductive Health Project to conduct needs assessment, training and evaluation of the Partograph in 4 regional hospitals: Cornwall Regional, Mandeville, Spanish Town and St. Ann's Bay.

Conducted a baseline survey in Health and Family Life Education in two schools and communities in the parish of St. James in collaboration with the Outreach section of ATRFMU. The study is part of the project "Promoting Healthy Lifestyles in Western Jamaica: HFLE – HIV/AIDS Project to be implemented by the Outreach Section in two schools in the communities of Granville and Catherine Hall.

#### CILINICAL REPORT Number of surgery done between the period July 2004 - June 2005.

Diagnostic Laparoscopy	150
Diagnostic Hysteroscopy	168
Tubal Ligation	82
Vasectomy	5
Operative Laparoscopy	101
Operative Hysteroscopy	20
Laparotomy	7

### Number of contraceptive distributed/administered

Oral contraceptives

Lofemenal Microgynon Ovidon 1122

Depo provera injection 2177 Insertion of Intra Uterine 387 contraceptive device Norplant insertion 164 Condoms 2536

# **Clinical Training**

The Family Planning Clinic has facilitated the training of the following group of persons:

Resident doctors 13 Medical Students 103 Pupil Midwives 35 Operating Theatre Nurses 13 Student Nurses 48 Anaesthetic students 36 Master of Science (Public Health) student 1

# PAPERS PRESENTED

. • The Male Factor: Review of 29 male patients' sexual, social and medical history and a poster at the ATRFMU stand, Research day, January 2005, Dacosta V, Everett D, Foster R, Frederick J, Wynter S

. • "PGD-the new embryology", on Friday 11 to Sunday 13 February 2005, 4<sup>th</sup> Annual Perinatal Audit and Symposium, the University Hospital's main lecture theatre, Miss Denise M Everett

. • Attitudes of School Children, Ages4-9 years, to Peers with HIV/AIDS. Barbados: UWI HARP 3<sup>rd</sup> Annual Scientific Conference May5-7, 2005, Meade, J. Hamilton, P. and Russell, P.

# PUBLICATIONS

.\* Lillith Williams and Elaine Jackson. "Adolescent Sexual and Reproductive Health Training Curriculum: Peer Education in Jamaica" (2004).

.\* Elaine Jackson and Norma Allen. "Adolescent Sexual and Reproductive Health Youth Manual" (2004)

.\* Pansy Hamilton and Lillith Williams. "GOJ/EC/UNFPA Joint Programme in Sexual and Reproductive Health A Study of the Knowledge, Values, Attitudes and Practice among Adolescents with Disabilities and their Parents" (2005).

\* Lillith Williams. "Introduction to Individual Counselling Programme Manual" (2005)

### **Book Chapter**

\* Horace Fletcher and **Joseph Frederick**, Abdominal Myomectomy Revisited Progress in Obstetrics and Gynaecology vol. 16 Ed John Studd

### Refereed

\* W. Bailey, C. Branche, J. Jackson and A. Lee, "Fatherhood in Risk Environment: <u>Gender</u> in the 21<sup>st</sup> <u>Century Caribbean Perspectives</u>, Visions and Possibilities. Ian Randle Publisher 2004

### Non-refereed

# P. Hamilton and J. Jackson

\* A Case Study of the Contraceptive Technology Research Programme in Jamaica, Family Health International (FHI) 2004

# PUBLIC SERVICE Pansy Hamilton.

- .- Vice President, Jamaica Association of Health Service Executives (Education)
- .- Vice President, Young Women's Christian Association of Jamaica
- .- Member, Board of Directors Whole Person Resource Centre
- .- Member, Population Association of America

- .- Member, American Studies Association of Jamaica
- .- Member, Planning Committee for the Annual Nurses and Midwives Research Conference
- .- Member, Committee for the Annual Emancipation Lecture

### Amy Lee

- .- Family Counsellor, Barbican Baptist Church
- .- Member Jamaica Association of Health Service Executives

# Jean Jackson

- .- Member, Stewardship Committee of St. Thomas Aquinas Centre
- .- Member, Jamaica Association of Health Service Executives