CURRICULUM VITAE

NAME : Sahar Mohamed EL-Sayed Hamed , Ass. Prof.

WORK ADDRESS: Hematology Lab., Urology and Nephrology Center, Mansoura University, Egypt.

PHONE

(02/012) 2665-3597(mobile). (02/050) 226-2222 (Work). (02/050) 226-3717 (Fax). <u>saharmhamed@gmail.com</u> (e- mail)

DATE OF BIRTH	: February 11 <i>th</i> 1965.
CITIZENSHIP	: Egyptian.
SEX	: Female.
SOCIAL STATUS	: Married, threechildren.
ID NUMBER	: 2650211 1202561

:

APPOINTMENTS :

-2012- Thereafter.

Associate professor of Immunology and Molecular Biology, Urology and Nephrology Center, Mansoura University, Egypt. Second toConsultant, Immunogenetic Unit, Genetic Department, Mansoura University Children Hospital.

-2009- 2012.

Consultant, Immunogenetic Unit, Genetic Department, Children Hospital second to Colleague of Medical Analysis, Urology and Nephrology Center, Mansoura University, Egypt.

-2005-2009.

Principal Investigator, Schistosome and Cancer Research Lab., Urology and Nephrology Center, Mansoura University, Egypt.

-2003-2005.

Consultant, Immunogenetic Unit, Genetic Department, Children Hospital second to Colleague of Medical Analysis, Urology and Nephrology Center, Mansoura University, Egypt.

-2002-2003.

Colleague of Medical Analysis, Urology and Nephrology Center, Mansoura University, Egypt.

-2000- 2002.

Post-doctoral Fellow, Experimental Uro-oncology Lab., Cancer Research Center, Laval University CHUQ- L'Hotel- Dieu de Quebec, Canada.

-1998-2000.

Senior Investigator, Schistosome and Cancer Research Lab., Urology and Nephrology Center, Mansoura University, Egypt.

-1992-1997.

Junior Investigator, Immunoparasitology Lab., Urology and Nephrology Center, Mansoura University, Egypt.

-1987-1992.

Research assistant, Immunoparasitology Lab., Urology and Nephrology Center, Mansoura University, Egypt.

QUALIFICATIONS:

-Diploma, 2014.

Department of "Botany", (Microbiology), Faculty of Science, Mansoura University, Egypt.

-Ass. Prof., 2012.

Department of "Zoology", (Immunology, Molecular Biology), Faculty of Science, Mansoura University, Egypt.

-Post-doc., 2002.

Experimental Uro-oncology Lab., Cancer Research Center, Laval University CHUQ- L'Hotel- Dieu de Quebec, Canada. {The Patched/ Sonic HedgeHog pathway in bladder cancer carcinogenesis}.

-Colleague, 2000.

Colleague of Medical Analysis, Urology and Nephrology Center, Mansoura University, Egypt.

-Ph.D., 1997.

Department of "Zoology", (Immunology & Parasitology), {Study of Immunochemical Changes in Experimental Schistosomiasis}. Faculty of Science, Mansoura University, Egypt.

-M. Sc., 1992.

Department of "Zoology", (Parasitology), {Experimental Study of Schistosoma Induced Glomerular Disease in the Golden Hamster (Cricentus auratus)}. Faculty of Science, Zagazig University, Egypt.

-Diploma, 1987.

Department of "Analytical Chemistry", Faculty of Science,

Mansoura University, Egypt.

-B.Sc., 1986.

Department of "Zoology- Chemistry", Faculty of Science, Mansoura University, Egypt.

TRAINING:

-Jan.-April, 1996.

Andreas Ruppel, Institute for Tropenhygiene, Heidelberg University, Germany.

Specific Work:

Training on the hybridoma techniques and selection of cell clones with specificity for Schistosome antigens.

WORKSHOPS:

-March, 27- 31, 1994.

HLA Typing by Molecular Techniques. Urology and Nephrology Center, Mansoura University, Egypt. During the First Franco- Egyptian Conference on Immunology and Molecular Biology.

-December, 10- 15, 2005.

Applications of Molecular Biology and Bioinformatics Course. Center for Genetic Engineering and Biotechnology (ACGEB), Ain Shams University, Egypt.

FELLOWSHIPS:

POST-DOCTORAL:

-Aug., 2000- June 2002.

Yves Fradet, MD, FRCSC, Research Center, Laval University CHUQ-L'Hotel- Dieu de Quebec, Canada. {The Patched/ Sonic HedgeHog pathway in bladder cancer carcinogenesis}.

Specific Work:

Induction of bladder tumor in Ptch transgenic mice using carcinogenic compound (BBN). Determination of the expression status of Ptch/ Shh signaling pathway components. This will be done by analyzing the expression of Ptch, Shh, Smo and Gil1 proteins by immunohistochemical analysis, RT-PCR and in situ hybridization. Correlating this with the expression of cell cycle regulators such as p21, p27, p53, MDM2 and p16 in the tumor induced.

TECHNICAL EXPERIENCE:

-Maintaining of Two Schistosome Life Cycle S. mansoni and S. hematobium.

-Preparation of Antigens from all Schistosome Life Cycle Stages.

-Enzyme Linked Immunosorbent Assay (ELISA).

-Antibody-Dependent Cell Mediated Cytotoxicity (ADCC).

-Cell proliferations, Mitogen and Antigen Transformation.

-Immunohistochemical Stains, Fluorescence & Peroxidase Techniques.

-Preparation of Monoclonal Antibodies. Cell Culture Techniques.

-Different Molecular Biological Techniques.

-Microsatellite analysis. FISH Techniques.

-Quantitative RT²- PCR.

-Experimental Animal Manipulations, animal embryo works.

-Stem Cell preparation and characterization by phenotyping and genotyping.

-Routine Clinical Biochemistry.

-Computer Manipulation.

-Statistical Analysis Techniques.

SKILLS:

* Stem Cell (SC) work in regenerative medicine.

* SC Isolation from different species, sources and different sites.

* SC Characterization and transformation.

*Supervising a complete research work. Writing complete scientific articles.

* Problem solving skills.Lead a team of work.

*Supervise different thesis, PhD and Master degrees.

*Initiating new labs with instruments, lab wears and chemicals.

*Experimental work with different animals. Work with animal embryo.

*Writing a complete research projects depending on the nature of the work.

ACTIVITIES:

1- REVIEWER:

- 1. Review a Proposal No: ARP-28-50 Entitled "Molecular diagnosis of Cryptosporidium parvum infection among diarrheic patients of different nationalities in Al madinah" Which is submitted to King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. Personal ID: 14976, (2008).
- **2.** Review a Proposal No:
 - a. ARP-29-53Entitled "Role of Cell Cycle-Related Genes in Chronic Myeloid Leukemia",
 - b. ARP-29-153Entitled "The national screening program for genetic mutations causing haemophilia among Saudi population and the development of PCR/HRM molecular diagnostic test",
 - c. ARP-29-255Entitled "Breast Cancer Screening Program in Al Madina Al Munawara Region",

Whichare submitted to King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. Personal ID: 14976, (2009).

- **3.** Review a Proposal No:
 - **a.** ARP-30-44Entitled "Specific Targeting for Prostate Cancer using PEGlyted Novel Nano-liposomesFormulations Encapsulated Anticancer Drugs",
 - **b.** ARP-30-332Entitled "Molecular Diagnosis of Dystrophin Gene Mutations In Duchenne MuscularDystrophy Disease Among Saudi Patients"
 - **c.** ARP-30-368Entitled "Molecular Epidemiology of HCV in Skin Disease Patientsin Kingdom of Saudi Arabia",

Whichare submitted to King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. Personal ID: 14976, (2010).

- **4.** Review a Proposal No:
 - a. A-L-11-0414. The title of the proposed research is; "Biomarker Discovery: Establishing Bioinformatics method to analyze highthroughput genonic, epigenomic and proteomic profile of bladder cancer in Saudi Arabia",
 - b. A-L-11-0453. The title of the proposed research is; "Colorectal cancer (CRC) in Kingdome of Saudi Arabia",
 - c. A-J-11-0346. The title of the proposed research is"The effect of Nano-Technology Modified Cyclosporine / Tacrolimus Compared to Conventional Cyclosporine / Tacrolimus on renal allograft and volume distribution in rabbit, and its possible future application in kidney Patient Survival"
 - d. D-L-11-0077. The title of the proposed research is "Stem cells transplantation therapy in the treatment of Parkinson's disease"
 - e. A-L-11-0796. Title of the proposed research is"Interleukin 28-B Polymorphism in HCV Genotype 4 InfectedPatients: Response to Therapy, Adverse Events and Disease Severity".
 - f. D-I-12-0102. Title of the proposed research is "Antibody Mediated Osseous Regeneration (AMOR): bioengineering bone in caninemodel for repair of craniofacial defects".

Which are submitted to King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. Personal ID: 14976, (2012).

5. Review the SECOND REPORT for the Proposal No: ARP-30-332Entitled "Molecular Diagnosis of Dystrophin Gene Mutations In Duchenne MuscularDystrophy Disease Among Saudi Patients"

Which are submitted to King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. Personal ID: 14976, (2013).

6. Review the FINAL REPORT for the Proposal No: ARP-30-332Entitled "Molecular Diagnosis of Dystrophin Gene Mutations In Duchenne MuscularDystrophy Disease Among Saudi Patients" Which are submitted to King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. Personal ID: 14976, (2014).

- 7. Review a Proposal No:
 - a. NO ARP-35-36 entitled: "Prevalence, Incidence, and Risk Factors of Acute Kidney Injury in Patients with Hematologic Malignancies Using Novel Biomarkers ",

Which are submitted to King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. Personal ID: 14976, (2014).

2- THESIS SUPERVISION:

A- Master Degrees

- Biochemical Evaluation of Renal Tubulointerstitial Injury after Mesenchymal Stem Cells Treatment: Experimental Study in Mice.M.Sc. Thesis in Biochemistry, Faculty of Science, Port Saeed University, Egypt. By Ahmed Nabil, 2010. Approved in2014.
- Biochemical Evaluation of Colchicines Treatment on Schistosoma-induced Hepatic amyloidosis: Experimental Study in Syrian golden hamsters. M.Sc. Thesis in Biochemistry, Faculty of Science, Port Saeed University, Egypt. By Mahmoud Saad, 2010. Approved in 2013.
- Biochemical Study of Adipogenic Differentiation of Mesenchymal Stem Cell Derived from mice Bone Marrow and Adipose Tissue. M.Sc. Thesis in Biochemistry, Faculty of Science, Port Saeed University, Egypt. By Ahmed El-Shenawy, 2010. Approved in 2013.
- Biochemical Assessment of ACE Gene Polymorphism in Nephrotic and End Stage Kidney Disease Patients. M.Sc. Thesis in Biochemistry, Faculty of Science, Zagazig University, Egypt. By Mohamed Hossien, 2010. Approved in 2012.
- Renal Tubulointerstitial Injury Treatment by Adipose derived Mesenchymal Stem Cells: Experimental Study in Mice.M.Sc. Thesis in Biochemistry& Molecular Biology, Faculty of Science, Monofia University, Egypt. By Isalm Dawoud, 2010. Approved in .
- 6. Biochemical study of Osteogenic Differentiation of Mesenchymal Stem Cells M.Sc. Thesis in Biochemistry, Faculty of Science, Damitta University, Egypt.

By Asmaa Algharaz, 2011. Approved by 2014.

B- <u>PhD Degrees</u>

 Immune Responses in Experimental Mice Infected with Schistosoma mansoni after Vaccination with Irradiated Cercariae by Advanced Approaches. PhD Thesis in Parasitology, Faculty of Medicine. Mansoura University, Egypt. By Aida Awaad, 2002.

3- TEACHING:

2009-2010:

Two courses of Bacteriology and Cell Biophysiology.

Master Students, Physics Department, Faculty of Science, Mansoura University.

2010-2011:

One course of Cell Biophysiology.

Master Students, Physics Department, Faculty of Science, Mansoura University.

4- FUNDS:

- a. **STDF Fund# 1067 PI: Entitled:**"Experimental Renal Tubulointerstitial Injury in Mice: Studyof Treatment with Mesenchymal Stem Cells at DifferentTime Intervals" (2010).
- b. STDF Fund# 1082 Co PI: Entitled:"Warm ischemia time for partial nephrectomy in a solitary kidney: experimental study in a canine model" (2010).
- c. **STDF Fund# 4713ResearcherCo PI: Entitled:**"Prophylaxis Against Renal Ischemia Reperfusion Injury in Canine Model: Stem Cell Approach" (2013).

5- SOCIETIES:

-Member of the International Society for Stem Cell Research.

- -Member of Egyptian Science Unions.
- -Member of the Egyptian German Society of Zoology.

-Member of Egyptian Society of Biochemistry.

SCIENTIFIC MEETING AND CONFERENCES:

- The 11th Congress Egypt. Soc. Nephrol. The Second Congress Arab Soc. Nephrol. Renal Transplant. (1991) Cairo, Egypt. Sobh MA, Moustafa FE, Sahar M Hamedand Ghoneim MA. Effect Of Parasite Eradication On Schistosomamansoni Nephropathy In Golden Hamsters.
- 2. The 12th Congress of The Egyptian Society of Nephrology. (December, 1992) Cairo, Egypt. A) Sobh MA, Moustafa FE,*Sahar M Hamed* and Ghoneim MA.

Effect Of Colchicine On *Schistosomahematobium* induced Amyloidosis In The Syrian Golden Hamsters. **B**) Moustafa FE,*Sahar M Hamed*, Ramzy RMR, Sobh MA and Ghoneim MA. Study Of Relationship Between Circulating Schistosomal Antigens And Glomerular Deposits In *Schistosoma* Infected Hamsters. **C**) Moustafa FE,*Sahar M Hamed*, Sobh MA and Ghoneim MA. Effect Of Sex On Development Of Amylodosis In *Schistosoma* Infected Hamsters.

- The 14th Congress Egypt. Soc. Nephrol.(1994). Sobh MA, Moustafa FE, Sahar M Hamedand Ghoneim MA. Effect Of Induced Antigen Excess On Schistosomamansoni Specific Nephropathy. Experimental Study In Golden Hamsters.
- American Association of Genitourinary Surgeons. (April, 2002)South Carolina, USA. Fradet Y, LaRue H, Bergeron A, Aboulkassim T and Hamed S. Genetic Studies on the Etiology of Superficial Papillary Bladder Cancer and Molecular Basis of Cancer Vaccines.
- Research Day, Faculty of Medicine, LavalUniversity. (May, 2002) Quebec, Canada. A) Hamed Sahar, Hovington Helene, Aboulkassim Tahar, LaRue Helene, Jeannotte Lucie, Latulippe Eva and Fradet Yves. Implication of Patched Gene in the Carcinogenesis of Bladder. B) Rigaud Jerome, Menard Claire, Langlois Frederic, Hamed Sahar, Aboulkassim Tahar, LaRue Helene and Fradet Yves. Loss of Heterozygot in the Microsatellites Marker of the Region 9q12-q22.31 in Superficial Bladder Cancer.
- Association Des Urologues Du Quebec XXVIIth Annual Meeting, 15-17 November 2002, Quebec, Canada. Larue Helene, Rigaud Jerome, Menard Claire, Langlois Frederic, Hamed Sahar, Aboulkassim Tahar, Lacombe Louis, Fradet Yves. Perte d' heterozygotie de Marqueurs Microsatellites de la Region 9q12-q22.31 Dans le Cancer Superficial de La Vessie.
- 7. 96^e Congres Francais d'Urologgie, **20- 23 November 2002, Paris, France.** Rigaud J., Menard C., Langlois F., *Hamed S.*, Aboulkassim T., Larue H.,Lacombe L., Fradet Y. Perte d' heterozygotie de Marqueurs Microsatellites de la Region 9q12-q22.31 Dans le Cancer Superficial de La Vessie.
- 8. *AUA Annual meeting*April 26- may 1, 2003 Chicago, Illinols, USA. Jerome Rigaud, Claire Menard, Frederic Langlois, Tahar Aboulkassim, *Sahar Hamed*, Helene LaRue, Louis Lacombe, Yves Fradet. Loss of Heterozygosity in Microsatellite Markers for Region 9q12-q22.31 in Superficial Bladder Cancer.
- **9.** *The second MERC conference*, **28-29 Sept. 2010.** On nanotechnology and stem cell transplantation in regenerative medicine (Kidney, liver and heart)Mansoura faculty of medicine MERCMain congress hall (Abu El-Naga).
- The Sixth International Conference on Biological Sciences.10- 11 November, 2010.Faculty of Science, Tanta University.
- **11.** *EUA Annual meeting*. Yasser Osman, *Sahar Hamed*, Fatma Elhousseny, Nashwa Barakat, Mohamed Abd Elhameed, Mohamed Gaballah, Attallah Shaaban.Is Solitary Kidney More Resistant To Ischemia? Results of an Experimental Prospective Study in a Canine Model. **2011.**
- 12. AUA Annual meeting. May 19-23, Atlanta, GA, USA. 2012. Yasser Osman, *Sahar Hamed*, Fatma Elhousseny, Nashwa Barakat, Mohamed Abd Elhameed,

Mohamed Gaballah, Attallah Shaaban.Is Solitary Kidney More Resistant To Ischemia? Results of an Experimental Prospective Study in a Canine Model.

13. *EUA Annual meeting*. Yasser Osman, *Sahar Hamed*, Sherry M. Khater, Nashwa M Barakat, Ahmed Mosbah, Mohamed A Gaballah and Atallah Shaaban. Ischemia versus Ischemia and partial nephrectomy in impacting future kidney function; Is there any difference? **2012.**

SCIENTIFIC PUBLICATIONS:

- 1- Ramzy RMR, Abd-AL-Aal Z and *Hamed SM*. The Hamster As An Animal Model To Study Nephropathy Secondary To Schistosoma mansoni Infection. New Egypt. J. Med. 5 (3): 270-274, (1991).
- 2- Ramzy RMR, Hamed SM and Ghoneim MA. Selection Of Susceptible Lines Of Biomphalaria alexandrina And Bulinus truncatus Snails To S. mansoni And S. hematobium Infection. J. Egypt. Pub. Health Assoc. LXV1;No 3,4: 357-371, (1991).
- **3-** Hanna LT, Gaballah AM, Fawzy M and *Hamed SM*.Evaluation of the Schistosomal Hepatic Lesions in Mice After Praziquantel and Silmarin Therapy. *J. Egypt. Soc. Pharmacol. Exp. Therap.* (1992).
- 4- Sobh MA, Moustafa FE, Hamed SM and Ghoneim MA. Infectious Glomerulopathy Induced by a Defined Agent (Schistosomamansoni): Progression Despite Early Elimination Of The Causal Agent. Exp. Nephrol. 1 (4): 261-264, (1993).
- 5- Sobh MA, Moustafa FE, Sahar M Hamed and Ghoneim MA. Effect Of Colchicine On Schistosoma- Induced Renal Amyloidosis In Syrian Golden Hamsters. Nephron. 70 (4): 478-485, (1995).
- 6- Sobh M, Moustafa F, *Hamid S* and Ghoneim M. Schistosomal- Specific Nephropathy In Syrian Golden Hamsters: Treatment By Induction Of Antigen Excess. *Nephrol. Dial. Transplant.* 11(11): 2178- 2184. (1996).
- 7- Moustafa FE, Hamouda MM, El- Shazly AM, Sheha G, *Hamid S*, El- NaggarHM, Habib FS, Morsy TA. Effect of anti- Schistosomal Treatment on Schistosomal Hepatic Pathology: an Experimental Study in Syrian Golden Hamsters. *J Egypt Soc Parasitol. 26 (2): 517-24.* (1996).
- 8- Moustafa FE, Hamouda MM, El- Shazly AM, Sheha G, *Hamid S*, El- NaggarHM, Ramadan NI, Morsy TA. *Schistosoma mansoni* hepatic fibrosis in Syrian golden hamsters: Effect of dose and duration of infection as shown by immunohistopathological studies. *J Egypt Soc Parasitol. 26 (3): 585- 99.* (1996).
- **9-** LaRue H, Simoneau M, Aboulkassim TO, Lemieux P, Girard J, *Hamed S*, Hovington H, Jeannotte L et Fradet Y. [The PATCHED/ Sonic Hedgehog signaling

pathway in superficial bladder cancer. Med Sci (Paris). 19 (10):920-5. (2003).

- **10-Hamed S,** LaRue H, Hovington H, Girard J, Jeannotte L, Latulippe E and Fradet Y. Accelerated induction of bladder cancer in patched heterozygous mutant mice. *Cancer Res.* 64 (6): 1938- 42. (2004).
- 11- A. EL-Meghawry EL-Kenawy, A.F. Ell-kott, S.M. Hamed, M. Kurok. Prognostic value of carcinoma-associated antigen MK-1 in urinary bladder carcinoma. Int J Bio Markers, 21 (3): 170-174. (2006).
- 12-Sahar Hamed, Ayman EL-Kenawy, Attalla El-kott, Fatma Moustafa and Hassan Abol-Emein. Schistosoma- Induced Amylodosis in Hamsters is a Gender-Dependent. Int Urol Nephrol; 38 (3-4):707-12 (2006). Epub 2007 Jan 13.
- **13-** *Sahar Hamed*. Experimental Schistosomal Specific Nephropathy in Hamster: Effect of Treatment by Immunopotentiation. J Egypt Ger Soc Zool; 63C: 33-44(2011).
- 14-Mohammad Al-Haggar, Agnieszka Madej-Pilarczyk, Lukasz Kozlowski, Janusz M Bujnicki, Sohier Yahia, Dina Abdel-Hadi, Amany Shams, Nermin Ahmad, Sahar Hamed, Monika Puzianowska-Kuznicka. A novel homozygous p.Arg527Leu LMNA mutation in two unrelated Egyptian families causes overlapping mandibuloacral dysplasia and progeria syndrome. Eur J Hum Genet. 2012; 20: 1134–1140.
- 15- Yasser Osman, *Sahar Hamed*, Fatma Elhousseny, Nashwa Barakat, Mohamed Abd Elhameed, Mohamed Gaballah, Attallah Shaaban. Is Solitary Kidney Really More Resistant To Ischemia? An Experimental Canine Study. J Urology. online, 2013. doi:pii: S0022-5347(13)03689-6. 10.1016/j.juro.2013.03.042. PMID:23517744
- 16-Mervat M El-Eshmawy, Sohier Yahia, Faeza El-Dahtory, Sahar Hamed, El HadidyM. El Hadidy,andMohamed Ragab: Hidden Y Chromosome Mosaicism in 48 Egyptian Patients withTurner's Syndrome. Genetics Research International. Volume 2013, Article ID 463529, 5 pageshttp://dx.doi.org/10.1155/2013/463529
- 17- *Sahar Hamed*, Ezz El-Gamal and Faten Zahran: Angiotensin Converting Enzyme Genotype Prevalence Among EgyptianPrimary Nephrotic And End Stage Renal Diseases Patients. The Journal of Biological Chemistry, 2013.

REFERENCES:

I. From Egypt:

prof. Dr. M. A. Ghoneim, 'M.D., M.D. (hon.)'.

Professor of Urology and Director of Urology and Nephrology Center Mansoura University, **Egypt.** E-mail: <u>unc@mans.edu.eg</u>. Tel: 0020502262222. Fax: 0020502263717.

prof. Dr. M. A. Sobh.

Professor of Internal Medicine and Head of Nephrology Service, Urology and Nephrology Center, Mansoura University, **Egypt.** E-mail: <u>sobh10@yahoo.com</u>. Tel: 0020502262222. Fax: 0020502263717.

prof. Dr. R.M.R. Ramzy.

Professor and Head of Immunology Unit Nutrition Institute, second to Senior Investigator, Center for Research and Training on the Vectors of Diseases, Ain Shams University, **Egypt.** E-mail: <u>reda.mr.ramzy@gmail.com</u> TeleFax: 0020226839622.

II. From Germany:

prof. Dr. A. Ruppel, 'Priv. Doz. Dr. rer. nat.'.

Professor and Head of Schistosomiasis Unit, Institute Fur Tropenhygiene und Offentiches Gesundheitswesen, Ruprecht-Karls- Universitat Heidelberg, Im Neuenheimer Feld 324, D- 69120, Heidelberg, **Germany.**E-mail: <u>Andreas.Ruppel@urz.uni-heidelberg.de</u>. Tel 06221-565044, Fax 06221-565948.

III. From Canada:

Prof.Dr. Y Fradet, MD, FRCSC,

Professor of Urology and Director of Experimental Uro- Oncology Laboratory, Cancer Research Center, Laval University CHUQ- L'Hotel- Dieu de Quebec, G1R 2J6, Canada.E-mail: <u>yves.fradet@crhdq.ulaval.ca</u> Tel: (418) 525-4444, Fax: (418) 691-5562