

CURRICULUM VITAE OF IPMB ALUMNI AS OF 2010

ALUMNI 1980's

Name: NOEL M. UNCIANO; Year of graduation in IPMB: 1986

Positions held since graduation: (dates, place&):

LECTURER, Dela Salle University (Manila, Philippines) 2ND/3RD Term, 1987

Research Specialist, Department Science & Technology-ASEAN Australia Biotechnology Project: 18Dec1989 to 30Nov1992

Research Specialist II, Industrial Technology Development Institute - DOST, 1 Dec1992 up to present

Major tasks: microbiological research, microbial isolation & purification, enzyme assays, fermentation

Did you finish a PhD?: none

PUBLICATIONS

In Vitro Effects of Balut Amniotic Fluid on Cultured Cells of Mosquito *Aedes albopictus* (Singh) Cell Clone. 1999 N. M. UNCIANO, G. D. REYES and F. C. DELFIN. Phil. Journ. Biotech. 10(1): 19-26.

Phenotype Expression of a Mosquito *Aedes albopictus* (Singh) Cell Clone: Growth at Alkaline pH in Amniotic Fluid. N.M. UNCIANO Abstract. 34th International Congress of Physiological Sciences, August 26-31 2001 Christchurch , New Zealand .

A Thermophilic Alkaline Xylanase Produced by Thermophilic Alkalophilic *Bacillus* sp. Strain NM-118. 1998 N. S. MENDOZA, M. B. BIGOL, N. M. UNCIANO, B. F. ALMONTE, and C. C. BORROMEIO. Ann. NY Acad. Sci. 1998 864: 428-430.

1998 N.S. MENDOZA, N. M. UNCIANO and E. O. DELA CRUZ. Annual Reports of ICBiotech. 21: 487-492.

Cellulase-free Xylanase Production from an Lkalophilic *Bacillus* sp. Strain NM-118 N.S.MENDOZA, M.B. BIGOL, N.M. UNCIANO, B.F. ALMONTE, and C.C. BORROMEIO. Annual Reports of ICBiotech. 20: 354-360.

1998 N.S. MENDOZA, M. B. BIGOL, N. M. UNCIANO, B. F. ALMONTE, and , C. C. BORROMEIO. Proceedings of the JSPS-NRCT/DOST/LIPI /VCC Joint Seminar on, Biotechnology for Sustainable Utilization of Biological Resources in the Tropics. 12:48-54.

Isolation, Selection and Characterization of Cellulase-free Xylanolytic Thermophilic Fungus.

1999 N.S. MENDOZA, N.M. UNCIANO, and M.B. BIGOL Proceedings of the JSPS-NRCT/DOST/LIPI/VCC Joint Seminar in, Biotechnology for Sustainable Utilization of Biological Resources in the Tropics. 13: 36 -46.

Cellulase-free Xylanase Production from Thermophilic *Thermomyces lanuginosus* C1a and Some Aspects of Application for Treatment of Abaca Pulp and Local Textile Fibers. 1999 N. S. MENDOZA, E. O. DELA CRUZ, N. M. UNCIANO, T. E. CALIWARA, A. MABILANGAN and N. GIRON. Proceedings of the JSPS-NRCT/ DOST/ LIPI/VCC Seminar Project V11 Microbial Treatment and Recycling of Organic Waste. Nov 21, 1999 Penang , Malaysia.

Production of Cellulase-free Xylanase by three Thermophilic fungi *Thermomyces lanuginosus*. 2000 N.S. MENDOZA , N.M. UNCIANO, T.E. CALIWARA, and R.M. CABACANG Proceedings of the JSPS-NRCT/DOST/LIPI/VCC Seminar Project VII Microbial Utilization of Unused Organic Resources in Asian Countries. 2000. Lombok,, Indonesia.

The Use of High Specific Activity and high level of Crude Cellulase-free Xylanase from a Thermophilic fungus in Pulp Bleaching. N.S. MENDOZA, L.A. MABILANGAN, M.T.E. CALIWAR and N.M. UNCIANO Abstract JSPSI-08. BioThailand 2001. 7-10 November 2001. Queen Sirikit National Convention Centre Bangkok , Thailand.

The Use of High Specific Activity and High Level of Crude Cellulase-free Xylanase from a Thermophilic Fungus in Pulp Bleaching. 2001 N.S. MENDOZA, L.A. MABILANGAN, T.E. CALIWARA, and N.M. UNCIANO Proceedings of the JSPS NRCT/DOST/LIPI/VCC Joint Seminar on Biotechnology for Sustainable Utilization of Biological Resources in the Tropics. 15: 66-71.

Application of High Level Cellulase-free Xylanase from Thermophilic *Thermomyces lanuginosus* 11P2R in Fiber Degumming. N.S. MENDOZA, M.T.E. CALIWAR , N.M. UNCIANO, and Z.I. DE GUZMAN Biotechnology for Sustainable Utilization of Biological Resources in the Tropics 2002-2003 16: 311-315.

A Local Isolate of Non-Cellulolytic, Xylanolytic and Pectinolytic Thermophilic Fungus, *Thermomyces lanuginosus* C1a. N.S. MENDOZA, M.T.E. CALIWARA and N.M. UNCIANO Phil. Journ. Sci. 2006 135(2): 113-119.

RESEARCH ACTIVITIES AND PRESENTATIONS

Young Investigator Award FAOPS-IUPS XXXVI International Congress of Physiological Sciences, Christchurch, New Zealand August 26-31, 2001

Grant Recipient of the American Geophysical Union (AGU) Two-year Membership Grant (2008 to 2009)

Poster Presentation. Phenotype Expression of a Mosquito *Aedes albopictus* (Singh) Cell Clone: Growth at Alkaline pH in Amniotic Fluid. N.M. UNCIANO 34th International Congress of Physiological Sciences, August 26-31 2001 Christchurch , New Zealand .
Workshop Speaker Presentation. Application of Crude Cellulase-free Xylanase from Thermophilic *Thermomyces lanuginosus* 119P2R for Degumming of Natural Fibers. N.M. UNCIANO et al. In, Microbial Recycling for Utilization of Agricultural Waste. JSPS Large Scale Cooperative Regional Workshop. March 6-9, 2003 . Mahidol University , Thailand .
Seminar Speaker Presentation. Phenotype Expression of a Mosquito *Aedes albopictus* (Singh) Cell Clone: Growth at Alkaline pH in Amniotic Fluid. N.M. UNCIANO ITDI Technical Seminar Series August 27, 2003 Metrology Conference, ITDI.
Abstract online Presentation. Microbial Biofluorescence Expressed by Bacterial Isolates Exposed to Organic Sulfur. N.M. UNCIANO, U.G. BIGOL, M.B. BIGOL, and R.M. CABACANG Abstract (Invited). AGU Chapman Conference on Organic Matter Fluorescence. 20-23 October, 2008 University of Birmingham , UK .
Poster Presentation. Microbial Dibenzothiophene Desulfurization Strains Isolated from Soil Microcosm. N.M. UNCIANO, U.G. BIGOL, & M.B. BIGOL Foundation Day, Industrial Technology Development Institute, July 1-2, 2009. Department of Science and Technology (DOST) Executive Lounge, Taguig.

TECHNICAL SERVICES

Supervision, On-The-Job Traineeship Cooperative Education Program: Microbiology & Genetics/ITDI and Partner Institutions Member, Board of Judges and Scientific Review Committee Intel Philippines Science Fair Regional Level Competition

Projects involved in:

- * Microbial Biodesulfurization of Petroleum Fuel
- * Isolation of Dibenzothiophene (DBT) Desulfurizing Microorganisms
- * Phytase
- * Participated in Integrated Program on Clean Technologies: Bioremediation of Pollutants in Liquid Effluents
- * Bench Scale Production, Characterization and Application Testing of Cellulase-free Xylanase for Pulp Improvement
- * Enzyme Production and Optimization
- * Application of Crude and Partially Purified Enzyme to Pulp Bleaching
- * Application of Crude Enzyme to Fiber Degumming
- * Application Testing & High Temperature lab. Scale fermentation
- * Enzyme Production, Partial Purification & Characterization
- * Isolation of Hemicellulolytic Microorganisms for the Pulp and Paper Indust

ALUMNI 1990's

Name: Samson Cassidy Muyanga, IPMB 1990

Date of Birth: December 1959

Citizenship: Zambia

RSA Residence: Permanent

ID No: 5912255562184

Contact Details:

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Lansdowne Road

Claremont

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South Africa

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+27 (0) 21 683 8411 (H)

+27 (0) 72 251 9278 (C)

Languages:

English (main)

Tumbuka (mother tongue)

Nyanja (fluent)

Bemba (fluent)

French (basic)

Countries of work:

Belgium

South Africa

Zambia

PROFESSIONAL PROFILE

Dr. Muyanga is an experienced molecular biologist from within the agricultural sector with strong complementary skills in team management and project coordination. He is a seasoned senior research scientist of twenty years, including three years teaching experience at tertiary institutions. Through research, he has made a substantial contribution to the field of molecular biology and biotechnology. As a panel member of the GMO advisory committee, Dr Muyanga continues to make important contributions in his field of expertise. Dr Muyanga has significant managerial skills at various levels. This has recently included the implementation of an academic support program at the University of the Western Cape. In addition four years experience in project management at a national level in Zambia, with success in strategic planning, timely execution and supervision of lower level projects has contributed to his skill set. Through his team leadership, he also has developed proficiency in programme monitoring and evaluation. Alongside teaching academic writing skills, he has experience of developing sound research proposals and report writing. Dr Muyanga has worked and travelled worldwide, which has enabled him to build skills working in multicultural environments and presented him with opportunities to attend and present at numerous international conferences.

EDUCATIONAL HISTORY:

1994 - 2000 University of Brussels, Belgium (PhD)

1988 - 1990 University of Brussels, Belgium (MSc)

1982 - 1987 University of Zambia, Lusaka – Zambia (BSc)

ACADEMIC AND PROFESSIONAL QUALIFICATIONS:

- PhD degree in Molecular Biology (*University of Brussels, Belgium 2000*)
- Certificate in Business Management (*Stellenbosch University, RSA, 2009*)
- Certificate in Project Management (*Cape Peninsula University of Technology, RSA, 2008*)
- Certificate in Identification of Fungi of Agricultural Importance (*International Mycological Institute, United Kingdom. 1994*)
- Certificate in Leadership and Development Workers Techniques (*Brussels, Belgium, 1990*)
- MSc. degree in Molecular Biology (*University of Brussels, Belgium, 1990*)
- BSc. degree in Agricultural Sciences with a bias in crop sciences (*University of Zambia, 1987*)

EMPLOYMENT & RESEARCH EXPERIENCE:

Assistant Lecturer: Biotechnology Department, University of the Western Cape (July – Dec. 2009)

Advisory Subcommittee Member: Department of Agriculture, Republic of South Africa (2006 – 2009)

Project Coordinator: University of the Western Cape, Postgraduate Enrolment and Throughput (PET) project (Jan 2008 – Dec, 2008).

Laboratory Manager: University of the Western Cape, Plant Biotechnology Unit, RSA (Oct 2006 - Dec 2007).

Academic Writing Coach (part time): University of the Western Cape, Postgraduate Enrolment and Throughput (PET) Jun 2003 – Dec, 2007)

Post Doctorate Research Fellowships:

- South African National Bioinformatics Institute, University of the Western Cape 02/2010 – to date.
Project title: Characterization of Vitamin A biosynthesis in plants using computational biology approach.
- University of Western Cape, Biotechnology Department (Oct 2006 - Dec 2008)
Project title: Characterisation of co-expressed genes during wheat Induced Systemic Resistance
- University of Western Cape, Biotechnology Department (Jul 2003 - Sept 2006).
Project title: Construction of Metagenomic DNA Libraries from Chinese Geothermal Samples and Screening for Unique Enzymes with Industrial value.
- University of the Western Cape, Biotechnology Department (Mar 2003 - Jul 2003).
Project title: Characterisation of Rhyzobacteria-mediated Induced Systemic Resistance in wheat.
- University of Cape Town, Molecular and Cellular Biology Department (Jul 2001 - Feb 2003).
Research title: Characterisation of Aldose Reductase gene homology from *Xerophyta viscosa* Barker in *Arabidopsis thaliana* and *Digitaria sanguinalis*
- University of Western Cape, Biochemistry Department (Mar 2000 - Jun 2001).
Project title: Isolation and characterization of molecular marker for Powdery mildew resistance and dormancy in apples.

PhD Studentship: University of Brussels, Belgium (Oct 1994 - Feb 2000)

National Wheat Research Coordinator (Zambia Wheat Research Team): Mount Makulu Research Station, Zambia (Jan 1992 - Oct 1994)

Project Manager, (Zambia Canada Wheat Research Project): Mount Makulu Research Station and ZAMCAN Project Coordinator on secondment to Canadian High Commission, Lusaka, Zambia. (Jan 1992 - Oct 1994)

Wheat Pathologist/Breeder: Mount Makulu Research Center, Zambia (Oct 1990 - Dec 1991)

Plant Pathologist: Mount Makulu Research Center, Zambia (Jan 1988 - Dec 1990)

Trainee Farm Manager: Mpongwe Agricultural Development Company Limited (MADC), Ndola Rural, Zambia (Nov - Dec 1987)

KEY SKILLS:

- **Managerial Skills:** Project coordination, laboratory management, project management, research, report writing, team coordination/leadership, student coaching, farm management.
- **Research skills:** *Molecular biology, microbiology and biotechnology research, wheat pathology and breeding.*
- **Teaching and training:** Assistant lecturer, workshop facilitation, postgraduate writing coach.
- **Monitoring and Evaluation:** Wheat breeding promotion, GMO application reviewing.

REFEREES:

Prof. Chris Gehring

Biotechnology Department,

University of the Western Cape

Private Bag X17, Bellville 7535, South Africa.

Phone: + 27 219592199

E-mail: cgehring@uwc.ac.za

Prof. Don Cowan

Biotechnology Department,

University of the Western Cape,

Private Bag X17, Bellville 7535, South Africa

Phone: + 27 21 9592083

E-mail: dcowan@uwc.ac.za

Prof. Felix Banda

Linguistics Department,

University of the Western Cape,

Private Bag X17, Bellville 7535, South Africa.

Phone: + 27 21 9592978

E-mail: fbanda@uwc.ac.za

1 LIST OF PUBLICATIONS

Stuart Meier, Chris Gehring, Camero Ross MacPherson, Mandeep Kaur, Monique Maqungo, Sheel Reuben, **Samson Muyanga**, Ming-Der Shih, Fu-Jin Wei, Smart Wanchana, Ramil Mauleon, Aleksandear Radovanovic, Richard Bruskiwich, Tsuyoshi Tanaka, Bijayalaxmi Mohanty, Takeshi Itoh, Rod Wing, Takashi Gojobori, Takuji Sasaki, Sanjay Swarup, and Yue-ie Hsing and Vladmir B. Bajic (2008). The promoter signatures in rice LEA genes can be used to build a co-expressing LEA gene network, *Rice*, 1: 177-187

Samson Muyanga, Stuart Meier, Chris Gehring and Vladimir B. Bajic (2007). ISR-mediated gene expression provides insight into the molecular regulation of systemic plant protection by non-pathogenic bacteria. Proceedings of the First South African Bioinformatics Workshop: 67-79.

Samson Muyanga, Victoria Nembaware and Chris Gehring (2005). The protection of *Pseudomonas aeruginosa* treated wheat seeds against powdery mildew and leaf blight correlates with up-regulated expression of a subtilisin-like gene in leaves. *South African Journal of Science* 100:201-204.

Don Cowan, Quinton Meyer, William Stafford, **Samson Muyanga**, Rory Cameron and Pia Wittwer (2005). Metagenomic Gene Discovery: present, past and future. *Trends in Biotechnology* 23:321-330

S.C. Mundree, B. Baker, S. Mowla, S. Peters, S. Marais, C. Vander Willigen, K. Hovender, A. Maredza, **S. Muyanga**, J. Farrant and J.A. Thomson (2002). Physiological and Molecular Insights into Drought Tolerance, *African Journal of Biotechnology* 1:28-38.

S.C. Muyanga (1994). Wheat Research Output for the Past 10 Years in Zambia. *Productive Farming Magazine*. January 1994 issue. Zambia National Farmers Union (ZNFU),

LIST OF PROCEEDINGS

Sam Muyanga and Don Cowan (2006). Phylogenetics of EN2 Surface Filamentous Biomass. MEGATech Final Consortium meeting. Report Presentation, 27-28th March 2006, University of the Western Cape. Cape Town, South Africa.

Samson Muyanga, Bill Grant, Antonio Ventosa, Ma Yanhe, Brian Jones and Don Cowan (2005). Phylogenetic Study of Archaeal and Bacterial Diversity of a Chinese Hypersaline Ecosystem. International Symposium on Extremophiles and their Applications. 28 Nov – 2 Dec. 2005. Tokyo, Japan

Muyanga SC, Arslanoglu A, Basvi PT, Cowan DA (2003). Construction of Metagenomic DNA Libraries from Chinese Geothermal Samples and Screening for Unique Enzymes with Industrial value. Cape Biotech 2003 International Conference proceedings. 17-18 Nov. 2003, Cape Town, South Africa.

S.C. Muyanga, M. Vauterin, P. Cornelis, M. Höfte and N. Koedam (1999). Induced Systemic Resistance in Wheat by *Pseudomonas aeruginosa* 7NSK2. Thirteenth John Innes Symposium: Attack and Defence in Plant Disease proceedings. 29-23 July, 1999.. Norwich, UK.

S.C. Muyanga, M. Vauterin, P. Cornelis, M. Höfte and N. Koedam (1999). Systemic Induction of Retrotransposon Expression in Wheat by *Pseudomonas aeruginosa* Strain 7NSK2. 51st International Symposium on Crop Protection proceedings. May 4th 1999, Gent, Belgium.

S.C. Muyanga M. Vauterin, P. Cornelis and M. Höfte, N. Koedam (1998). Induction of systemic Acquired Resistance in Wheat by *Pseudomonas aeruginosa*. 7th International congress of Plant Pathology proceedings. 9th - 16th August, 1998, Edinburgh, Scotland, UK.

S. Abeysinghe, **S.C. Muyanga**, V. Anjaiah, and N. Koedam P. Cornelis and G. De Meyer (1998). Direct and Indirect Effects of Phenazine Compounds in Plant Protection. 50th International Symposium on Crop Protection proceedings, May 9, 1998, Gent, Belgium.

S.C. Muyanga (1994).Breeding for Disease Resistance in Wheat in Zambia: Durability. Regional Workshop for Eastern Central and Southern Africa on “Breeding for Disease Resistance with Emphasis on Durability proceedings (Netherlands Development Agency). 3rd - 7th October 1994, Njoro, KENYA.

S.C. Muyanga (1994). Production and Research Review of Small Cereals in Zambia. Regional Workshop for Eastern Central and Southern Africa on “Breeding for Disease Resistance with Emphasis on Durability proceedings (Netherlands Development Agency). 3rd - 7th October 1994, Njoro, KENYA.

S.C. Muyanga (1993). Wheat Production and Research in Zambia: Constraints and Sustainability. 8th Wheat Workshop for Eastern Central and Southern Africa proceedings (CIMMYT). 6th - 9th June 1993, Kampala, UGANDA.

S.C. Muyanga (1991). Rainfed Wheat Research in Zambia: Pathology and Breeding. 7th Wheat Workshop for Eastern, Central and Southern Africa proceedings (CIMMYT). 4th – 8th September 1991 Nakuru, Kenya.

P. Cornelis, S. Hettiarachi, X. Muunga, **S.C. Muyanga**, M. Thys and N. Koedam (1990). Disease-Suppression by *Pseudomonas* in the *CICER-FUSARIUM* SYSTEM. 7th Congress of the Federation of European Societies of Plant Physiology proceedings. August 5 - 10, 1990 Umea, Sweden.

Name: Asma Al-Najjar; Year of graduation in IPMB: 1991

Positions held since graduation: (dates, place&) Lecturer in the Faculty of Agriculture/ Alfateh University/ Tripoli Libya

Major tasks: Teaching/ involved in biotechnology and advanced technology curricula/ Establishment of biotechnology research center

Did you finish a PhD ?: Yes

List of publications:

Projects involved in: Bioremediation, Bioactive plant products

Name: Shuo Li; Year of graduation in IPMB: 1992

Positions held since graduation: (dates, place&)

Research Assistant at McFarlane Burnet Centre of Medical Research, Melbourne, Australia (04/1994 - 06/1994).

PhD student and Research Officer at Monash Medical Centre, Melbourne, Australia (01/1995 - 07/2000)

Postdoctoral Scientist at AIDS Immunology Lab, Department of Microbiology and Immunology, The University of Melbourne, Melbourne, Australia (06/2000 – 12/2000)

Postdoctoral Scientist, Metabolic Pharmaceuticals Ltd., Melbourne, Australia (05/2001 – 12/2001)

Postdoctoral Research Fellow, Allergy Research Lab, Department of Immunology, Monash University, Alfred Hospital, Melbourne Australia (02/2002 – 12/2004)

Postdoctoral Scientist at Burnet Institute of Medical Research, Melbourne, Australia (01/2005 – Present)

Major tasks:

Dr Shuo Li has been involved in research in academia and industry

Did you finish a PhD ?: Yes in 2000

List of publications:

1. Li, S., S. Floess, A. Hamann, S. Gaudieri, A. Lucas, M. Hellard, S. Roberts, G. Paukovic, M. Plebanski, B. E. Loveland, C. Aitken, S. Barry, L. Schofield, and E. J. Gowans. 2009.

- Analysis of FOXP3⁺ regulatory T cells that display apparent viral antigen specificity during chronic hepatitis C virus infection. *PLoS Pathog* 5:e1000707.
2. Martyn, J. C., A. J. Cardin, B. D. Wines, A. Cendron, S. Li, J. Mackenzie, M. Powell, and E. J. Gowans. 2009. Surface display of IgG Fc on baculovirus vectors enhances binding to antigen-presenting cells and cell lines expressing Fc receptors. *Arch Virol* 154:1129.
 3. Li, S., E. J. Gowans, C. Chougnet, M. Plebanski, and U. Dittmer. 2008. Natural regulatory T cells and persistent viral infection. *J Virol* 82:21.
 4. Li, S., K. L. Jones, D. J. Woollard, J. Dromey, G. Paukovics, M. Plebanski, and E. J. Gowans. 2007. Defining target antigens for CD25⁺ FOXP3⁺ IFN- γ - regulatory T cells in chronic hepatitis C virus infection. *Immunol Cell Biol* 85:197.
 5. Martyn, J. C., X. Dong, S. Holmes-Brown, P. Pribul, S. Li, H. E. Drummer, and E. J. Gowans. 2007. Transient and stable expression of the HCV envelope glycoproteins in cell lines and primary hepatocytes transduced with a recombinant baculovirus. *Arch Virol* 152:329.
 6. Li S, Holdsworth SR and Tipping PG. MHC class I pathway is not required for crescentic glomerulonephritis in mice. *J Clin Exp Immunol*. 2000, 122: 453-458.
 7. Li S, Holdsworth SR and Tipping PG. B7.1 and B7.2 regulate crescentic glomerulonephritis in mice. *Eur J Immunol*. 2000, 30(5):1394-1401.
 8. Li S, Kurts C, Kontgen F, Holdsworth SR, Tipping PG. Major histocompatibility complex class II expression by intrinsic renal cells is required for crescentic glomerulonephritis. *J Exp Med*. 1998, 188(3): 597-602.
 9. Li S, Holdsworth SR, Tipping PG. Antibody independent crescentic glomerulonephritis in mu chain deficient mice. *Kidney Int*. 1997, 51(3):672-678.
 10. Huang, X.R, Tipping, P.G, Li S and Holdsworth, S.R. Th1 responsiveness to nephritogenic antigens determines susceptibility to crescentic glomerulonephritis in mice. *Kidney Int*. 1997 51(1):94-103.

Projects involved in:

HIV Glomerulonephritis Obesity Allergy Hepatitis C Immunology

Name: Gholamreza; IPMB year 1993

Family name: Hassanzadeh Ghassabeh

Date of birth: Sep. 11, 1963.

Gender: Male

Marital status: Married

Children: One

Nationality: Belgian

Languages: Excellent English, good knowledge of Dutch

Country of residence: Belgium

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VIB Nanobody Service Facility

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Vrije Universiteit Brussel (VUB), Gebouw E, Niveau 8,

Pleinlaan 2,

B-1050, Brussels,

Belgium.

Academic qualification:

Ph.D. in Molecular Biology (greatest distinction), 1993-1998, Vrije Universiteit Brussel, Brussels, Belgium (Research project: Intrabody-mediated gene modulation in *Drosophila*).

M. Sc in Molecular Biology (greatest distinction), 1991-1993, Vrije Universiteit Brussel, Brussels, Belgium (Research project: Pyrimidine regulation of the P1 promoter of the carAB operon of *E. coli*: Cloning of the carP gene encoding a trans-acting regulatory factor).

B.Sc in Genetics (greatest distinction), 1985-1989, Chamran University, Ahwaz, Iran.

1.1 Assignments:

- **Post-doctoral fellow** (since April 1998 to April 2006), Department of Molecular and Cellular Interactions, (formerly: Department of Immunology, Parasitology and ultrastructure), Flanders Interuniversity Institute for Biotechnology (VIB), Vrije Universiteit Brussel (VUB), Brussels, Belgium.
- **Lecturer** (since Oct. 1998), Advanced and Applied Molecular Biology, Interuniversity Postgraduate Programme Molecular Biology (IPMB), Vrije Universiteit Brussel, Brussels.
- **Manager** (since April 2006), Nanobody Service Facility (NSF), Flanders Interuniversity Institute for Biotechnology (VIB), Belgium.
- **Private consultant: Affinity reagents** (since 2008).
- **Course leader:** (since February 2008), “Antibody Display, Selection and Engineering”. Pharmaceutical Training International (PTI), London. (www.pti-courses.com).
- **Steering committee member:** (since 2008) Interuniversity Postgraduate Programme Molecular Biology (IPMB), Vrije Universiteit Brussel, Brussels.
- **Referee for the following journals:**
 1. Circulation Research, since 2002.
 2. Maturitas (The European Menopause Journal), 2003.
 3. J. Immunology, since 2004.
 4. Cancer Research, since 2004.
 5. Lancet Oncology, since 2005.
- **Member of the Belgian Immunological Society, Since 2000.**
- **Member of the Belgian Association for Cancer Research, since 1999.**
- **Follow-up of M. Sc and Ph.D. Students:**

M. Sc. thesis: M.P. Kumudu De Silva (1995-1996), Wentao Huang (1995-1996), Nick Devoogdt (1996-1997), Bianca Hemmeryckx (1997-1998), Usama Najjar (1998-1999), Jing Zhang (2000-2001), Henry E. Takwi Nkyimbeng (2002-2003), Rembert Van den

Bosch (2004-2005), Irene Ajonina U. (2005-2006), Emile Arrey-Akpang (2006-2007), Nguyen Duc Trong (2007-2008).

Ph. D. thesis: Nick Devoogdt (1998-2004), Henry E. Takwi Nkyimbeng (2003-2006), Nguyen Duc Trong (2008 till now).

1.2 Major current research activities:

1. *Unravelling the molecular mechanisms underlying cancer cell metastasis*

The most life-threatening aspect of the pathogenesis of cancer is the invasive and metastatic capacity of tumour cells. Therefore, the search for markers that can be used to predict and/or to prevent invasion and metastasis has become a vantage point in cancer research. In addition, invasion and metastasis are not unique features of malignant cells, but are also manifested by normal cells. Thus, from a fundamental standpoint, the study of the invasive behaviour of malignant cells may also lead to a better understanding of the invasive behaviour of normal cells.

To understand molecular mechanisms underlying invasion and metastasis, we are using the 3LL (Lewis Lung) carcinoma model and the BW-Sp3 T-cell lymphoma model. Using these tumour models, we identified several genes whose expression was modulated in the course of tumour progression. Among these genes are secretory leukocyte proteinase inhibitor (SLPI) and P-selectin glycoprotein ligand 1 (PSGL1) which we demonstrated to play a causative role in metastasis of cancer cells. We are currently studying the regulation and mode of action of these genes during tumour progression.

2. Identification of genetic signatures of distinct macrophage states as a tool to monitor therapy and immunomodulation

Macrophages act as a crucial switch between innate and adaptive immune responses, type 1 and type 2 immune responses, and activation versus suppression of these responses. Although it is well known that macrophages occur in distinct activation states, corresponding with the distinct states of the switch, the nature of these states is ill-defined and no reliable marker(s) identifying these distinct activation states is yet available.

The development of modulators able to influence the nature of the immune reaction (e.g. type 1 versus type 2) is an important subject of pharmacological R&D in a variety of diseases. Presently, effects of such modulators can be investigated in a reliable way by using the disease response itself as endpoint. Well-defined markers for different macrophage activation

states would circumvent this laborious procedure and also facilitates the elucidation of the mechanisms of action of immune modulators.

In order to obtain such markers, we embarked on identifying genes that are associated with different states of macrophage activation in various disease models. These efforts resulted in the identification of a common gene signature for alternatively activated myeloid cells elicited *in vivo* under different pathological conditions. We have studied the regulation of the expression of these genes by various cytokines and are currently focusing on the functional analysis of a number of these genes.

1.3 Teaching approach:

In recent years, we have witnessed many technological advances (e.g. large-scale DNA sequencing, microchip technology, MALDI-TOF mass spectrometry, bioinformatics) which allow large data acquisition and analysis. These technological advances promise the expansion of biological research from strictly reductionist approaches, which focus on individual phenomena, to synthetic approaches that allow to obtain an integrated picture of a whole organism. Such a fundamental change in the nature of the future biological research makes us to change the way in which we prepare students for the future challenges.

In the future, competent biologists are the ones who are capable of exploiting both reductionist and synthetic approaches, and can create meaningful links between the data obtained by the two different, yet complementary, approaches in order to answer relevant questions in both fundamental and applied biology.

My lectures in molecular biology aim at providing the ideal training for a generation of scientists who wish to combine the ideology of traditional science with that of the new multidisciplinary approaches, since such a combination will be a major driving force for revolutionary discoveries in biology.

Technical skills:

Construction and screening of genomic libraries, Phage display libraries and subtracted cDNA libraries, Panning, DNA microarrays, *in vitro* DNA-protein interaction studies, RNA interference, Yeast two-hybrid, DNA sequencing, SDS-PAGE, Western blot, Northern blot, Reverse northern blot, RNA dot blot, Southern blot, ELISA, Colony blot, PCR (standard RT-PCR, quantitative comparative PCR, PCR cloning and mutagenesis, etc.), Expression of

recombinant proteins in *E. coli*, Generation and analysis of transgenic flies, Transfection of mammalian cells and analysis of transfectants, handling of laboratory animals, basic bioinformatics as well as general standard molecular and cellular techniques commonly used in molecular and cellular biology labs.

Publications:

1. Kholti A., **Gholamreza H. Ghassabeh**, Charlier D., Huysveld N., Pierard A. and Glansdorf N.

The CarP gene involved in pyrimidine regulation of the *E. coli* carAB operon is identical to PepA/XerB. (1995) Archives of Physiology and Biochemistry **103**, 159.

2. Charlier D., **Hassanzadeh Gh. Gh.**, Kholti A., Gigot D., Pierard A. and Glansdorf N.

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¶ D N. and H. Gh. Gh. contributed equally to this work.

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12. Raes G., Brys L., Dahal B.K., Brandt J., Grooten J., Brombacher F., Vanham G., Noël W., Bogaert P., Boonefaes T., Kindt A., Van den Bergh R., Leenen J.M.P., De Baetselier P. and **Hassanzadeh Gh. Gh.**

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13. Brys L., Beschin A., Raes G., **Hassanzadeh Gh. Gh.**, Noël W., Brandt J., Brombacher F. and De Baetselier P.

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15. **Hassanzadeh Ghassabeh. Gh.**, De Baetselier P., Brys L., Noël W., Van Ginderachter J.A., Meerschaut S., Beschin A., Brombacher F. and Raes G.

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17. Van Ginderachter J.A., Movahedi K., **Hassanzadeh Gh. Gh.**, Meerschaut S., Beschin A., Raes G. And De Baetselier P.

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21. Bosschaerts T., Guilliams M., Noël W., Hérin M., Burk R.F., Hill K.E., Brys L., Raes G., **Hassanzadeh Gh. Gh.**, De Baetselier P. and Beschin A.

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22. Saerens D., **Hassanzadeh Ghassabeh Gh.**, Muyltermans S.

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24. Muyltermans S., Baral TN., Retamozzo VC., De Baetselier P., De Genst E., Kinne J., Leonhardt H., Magez S., Nguyen VK., Revets H., Rothbauer U., Stijlemans B., Tillib S., Wernery U., Wyns L., **Hassanzadeh-Ghassabeh Gh.**, Saerens D.

Camelid immunoglobulins and nanobody technology (2009) *Vet. Immunol. Immunopathol.* **128**: 178-183.

25. Buelens K., **Hassanzadeh-Ghassabeh G.**, Muyltermans S., Gils A., Declerck P.J.

Generation and Characterization of inhibitory Nanobodies towards thrombin activatable fibrinolysis inhibitor (in press) *J. Thrombosis and homeostasis.*

2 Patents:

1. The use of a polypeptide domain to modulate the tumorigenic and metastatic potential of cancer cells (EPO 3101265.1), (PCT/EP2004/050627). International publication No. WO 2004/098626 A2.

Inventors: Devoogdt N., Revets H., De Baetselier P., and **Hassanzadeh Gh. Gh.**

Applicant: Vlaams Interuniversitair Instituut voor Biotechnologie (VIB).

2. Novel markers for alternatively activated macrophages (PCT/EP2004/052076). International publication No. WO 2005/024418 A2.

Inventors: Raes G., **Hassanzadeh Ghassabeh Gh.** and De Baetselier P.

Applicant: Vlaams Interuniversitair Instituut voor Biotechnologie (VIB).

3. Use of P-selectin glycoprotein ligand-1 in modulation of hematogenous metastasis of lymphomas (PCT/EP2006/066490). International publication No. WO 2007/033959 A2.

Inventors: Raes G., **Hassanzadeh Gh. Gh.**, and De Baetselier, P.

Applicant: Vlaams Interuniversitair Instituut voor Biotechnologie (VIB).

2.1 Chapters in books:

1. Noël W., De Baetselier P., Raes G., **Hassanzadeh Gh. Gh.**, Namangala B., Gomez J., Brys L., and Beschin A. Evaluating the role of alternatively activated macrophages during parasitic infections: a quest for markers. In: "Recent Research and Developments in Infection and Immunity". Ed. Pandalai. SG. (2003), Vol. 1, Chapter 28, pp. 451-473. Kerala, India, Transworld Research Network.

2. Van Ginderachter, J., Liu Y., Devoogdt N., Noël W., Brys L., **Hassanzadeh Ghassabeh Gh.**, Raes G., Geldhof A., Beschin A., Revets H., and De Baetselier P.

Classical and alternative activation of macrophages: different pathways of macrophage-mediated tumor progression. In: "Selected Aspects of Cancer Progression: Metastasis, Apoptosis and Immune Response". Eds. H. E. Kaiser et al. (2008), pp. 139-156. Springer.

3. Muyldermans S., **Hassanzadeh Ghassabeh Gh.**, Saerens S.

Single-domain antibodies. In: “Recombinant antibodies for immunotherapy”. Ed. Melvyn Little (2009), Chapter 16, pp. 216-230. Cambridge University Press.

4. **Hassanzadeh Ghassabeh Gh.**, Muyltermans S., and Saerens D.

Nanobodies, single-domain antigen-binding fragments of camelid Heavy-Chain antibodies. In “Biotechnology: Pharmaceutical Aspects, Vol. XI: Current Trends in Monoclonal Antibody Development and Manufacturing”. Eds. S.J. Shire, W. Gombotz, K. Bechtold-Peters, J. Andya (2010), Chapter 3, pp. 29-48. AAPS Press, Springer.

5. **Hassanzadeh Ghassabeh Gh.**, Saerens D., and Muyltermans S.

Isolation of antigen-specific Nanobodies. In “Antibody Engineering”. Eds. R. Kontermann & S. Dübel (2010), Vol. 2, Chapter 20, pp. 251-266. Springer-Verlag, Berlin Heidelberg.

Abstracts and communications:

1. CarP- and IHF-mediated control of P1, the upstream pyrimidine-specific promoter of the carAB operon of the *E. coli* and *S. typhimurium*: Identification of cis-acting sites.

Charlier, D., Roovers, M., Gigot, D., Huysveld, N., **Hassanzadeh, Gh.**, Pierard, A., and Glansdorff, N.

NFWO-FNRS contact group, third meeting, Louvain-La-Neuve, Belgium, May 26, 1993.

2. On the role of the carP and IHF in the regulation of the pyrimidine-specific promoter P1 of the *E. coli* K12 and *S. typhimurium* LT2 carAB operons.

Charlier, D., **Hassanzadeh Ghassabeh, Gh.**, Kholti, A., Pierard, A., and Glansdorff, N.

The 14th international symposium of arginine (Genes and Enzymes of related pathways), Sep. 12-14, 1994, Paris, France.

3. *E. coli* carP, involved in pyrimidine regulation of the carAB operon encoding carbamoylphosphate synthetase, is a DNA binding protein identical to aminopeptidase A, also involved in site-specific DNA recombination.

Charlier, D., Kholti, A., **Ghassabeh Gholamreza, H.**, Gigot, D., Baeyst, N., Huysveld, N., Pierard, A., and Glansdorff, N.

NFWO-FNRS contact group meeting, Brussels, Jan. 27, 1995.

4. Intrabodies: A promising tool in Developmental Biology and Gene therapy.

Gh., Hassanzadeh Gh., S., Muyltermans, L., Brys, C., Dambly-Chaudière, and R., Hamers.

Colloquium Imol, VUB, Brussels, 22 May, 1996.

5. Identification of antigens associated with tumour progression by suppression subtractive hybridisation.

Gh., Hassanzadeh Gh., N., Devoogdt, I., Vandertaelen, B., Hemmeryckx, H., Verschueren, P., De Baetselier, and H., Revets.

VIB congress, Sunparks, Mol, 25-26 Feb., 1999.

6. Molecular analysis of the pro-metastatic behaviour of TNF- α

N., Devoogdt, **Gh., Hassanzadeh Gh.,** L., Brijs, P., De Baetselier, and H., Revets

Meeting of the Belgian association for the study of cancer, Ghent, Belgium, 29 Jan., 2000.

7. Tumour targeting experiments with camel single-domain antibodies

V., Cortez-Retamozo, M., Lauwereys, **Gh., Hassanzadeh Gh.,** S., Muyldermans, P., De Baetselier, and H., Revets

The 17th International conference on advances in the application of monoclonal antibodies in clinical oncology, Pythagorion, Samos, Greece, 31 May- 2 June, 2000.

8. Secretory leukocyte protease inhibitor enhances metastatic potential of Lewis Lung Carcinoma cells.

Devoogdt, N., **Hassanzadeh, Gh., Gh.,** Toreele, E., Brys, L., De Baetselier, P., and Revets, H.

Membrane-bound proteolytic enzymes and cancer, Mondello (Palermo), Italy, May 19th -21st, 2001.

9. FIZZ1 and Ym gene expression as a tool to distinguish alternatively versus classically activated macrophages during African trypanomosis.

Noël, W., **Hassanzadeh Gh., Gh.,** Raes, G., Namangala, B., Brys, L., De Baetselier, P., Beschin, A.

6th Annual Woods Hole Immunoparasitology Conference, Marine Biological Laboratory, Woods Hole, Massachusetts, USA, April 28-May 1, 2002.

10. Identification of genes that are differentially expressed in alternatively versus classically activated macrophages.

Raes, G., Noël, W., Beschin, A., Brys, L., De Baetselier, P., **Hassanzadeh Gh., Gh.**

14th international conference on lymphatic tissues and germinal centers in immune reactions (14th GCC), Groningen, The Netherlands, June 23rd-27th, 2002.

11. Overexpression of Secretory Leukocyte Protease Inhibitor (SLPI) promotes malignancy of Lewis Lung Carcinoma Cells.

Devoogdt, N., **Hassanzadeh Gh., Gh.**, Toreele, E., Brys, L., De Baetselier, P., and Revets, H.

IXth International Congress of Metastasis Research Society, Chicago, Illinois, USA, Sep. 20th-22th, 2002.

12. Gene expression profiling of alternatively versus classically activated macrophages.

Raes, G., Noël, W., Beschin, A., Brys, L., De Baetselier, P., **Hassanzadeh Gh., Gh.**

Keystone Symposia: Regulatory and effector functions of macrophages, Linking innate with adaptive immune responses, Taos Convention Center, Taos, New Mexico, USA, Jan. 30-Feb. 4, 2003.

13. Genetic profile and physiological role of alternatively activated macrophages in various pathologies.

Hassanzadeh Gh., Gh., Noel, W., Raes, G., De Baetselier, P., Beschin, A.

12th International Congress of Immunology, Montréal, Québec, Canada, July 18-23, 2004.

14. E-cadherin as a novel marker for alternatively activated macrophages elicited by parasitic infections and cancer.

Van Ginderachter, J. A., Raes, G., Meerschaut, S., Brys, L., Beschin, A., Noel, W., De Baetselier, P. and **Hassanzadeh Gh., Gh.**

Joint Spring Meeting of the Belgian Society for Cell and Developmental Biology and the Belgian Immunological Society, Brussels, Belgium, May 27-28, 2005.

15. Identification of a common gene signature for type II cytokine-associated myeloid cells elicited *in vivo* during different pathologies.

Raes, G., De Baetselier, P., Brys, L., Noel, W., Van Ginderachter, J.A., Beschin, A., Meerschaut, S. and **Hassanzadeh Gh., Gh.**

19th Meeting of the European Macrophage and Dendritic Cell Society (EDMS), Amsterdam, The Netherlands, October 6-8, 2005.

16. Stimulating PPAR γ subverts CTL suppression by cancer-associated alternatively activated macrophages.

Van Ginderachter, J.A., Meerschaut, S., Liu, Y.Q., **Hassanzadeh Gh., Gh.**, Raes, G. and De Baetselier, P.

19th Meeting of the European Macrophage and Dendritic Cell Society (EDMS), Amsterdam, The Netherlands, October 6-8, 2005.

17. Unraveling the functions of classically and alternatively activated myeloid suppressor cells during parasite infections.

Beschin, A., Noel, W., Raes, G., Brys, L., Guilliams, M., Bosschaerts, T., **Hassanzadeh Gh., Gh.** and De Baetselier, P.

19th Meeting of the European Macrophage and Dendritic Cell Society (EDMS), Amsterdam, The Netherlands, October 6-8, 2005.

18. Immature myeloid cells in cancer differentiate towards M2 macrophages suppressing anti-tumor CTLs: implication of the arachidonic acid metabolism.

Van Ginderachter, J.A., Meerschaut, S., Liu, Y.Q., **Hassanzadeh Gh., Gh.**, Raes, G. and De Baetselier, P.

38th Annual Meeting of the Society for Leukocyte Biology, Oxford, England, September 21-24, 2005.

19. Identification of a common gene signature for type II cytokine-associated myeloid cells elicited *in vivo* during different pathologies.

Raes, G., De Baetselier, P., Brys, L., Noel, W., Van Ginderachter, J.A., Beschin, A., Meerschaut, S. and **Hassanzadeh Gh., Gh.**

38th Annual Meeting of the Society for Leukocyte Biology, Oxford, England, September 21-24, 2005

20. Unraveling the functions of classically and alternatively activated myeloid suppressor cells during parasite infections.

Beschin, A., Noel, W., Raes, G., Brys, L., Guilliams, M., Bosschaerts, T., **Hassanzadeh Gh., Gh.** and De Baetselier, P.

38th Annual Meeting of the Society for Leukocyte Biology, Oxford, England, September 21-24, 2005

Name: Eduardo V. Zambrano, MD, MSc, FCAP; Year of graduation in IPMB: 1994

Positions held since graduation: (dates, place&) (see below)

Major tasks: (see below)

Did you finish a PhD ?: No

List of publications: (see below)

Projects involved in: (see below)

CERTIFICATIONS

- Educational Commission for Foreign Medical Graduates (ECFMG), 1997
- Anatomic and Clinical Pathology, American Board of Pathology, 2003
- Pediatric Pathology, American Board of Pathology, 2003

RESIDENCY AND FELLOWSHIP TRAINING:

- Clinical Fellow in Pediatric Pathology, Boston Children's Hospital, Harvard Medical School. Boston, MA (July 2002 – June 2003)
- Combined Anatomic and Clinical Pathology Residency Programs (AP/CP), Departments of Pathology and Laboratory Medicine, Yale-New Haven Hospital, Yale University School of Medicine. New Haven, CT (July 1997 - June 2002)

PROFESSIONAL EXPERIENCE:

Academic Appointments:

- Associate Professor, Department of Pathology, Medical College of Wisconsin. Milwaukee, WI (since January 1, 2010)
- Associate Professor, Department of Pathology, Yale University School of Medicine. New Haven, CT (July 1, 2009 – December 31, 2009)
- Assistant Professor, Department of Pathology, Yale University School of Medicine. New Haven, CT (July 1, 2004 - June 30, 2009)
- Instructor, Department of Pathology, Yale University School of Medicine. New Haven, CT (July 1, 2003 - June 30, 2004)
- Professor, School of Medicine, Universidad Católica de Santiago de Guayaquil. Guayaquil, Ecuador (since 1996)

Clinical Experience:

- Consultant, Musculoskeletal Pathology, Department of Pathology, Yale University School of Medicine. New Haven, CT (January 2007 – December 2009)

- Attending Pathologist, Department of Pathology, Milford Hospital. Milford, CT (May 1, 2008 – December 31, 2009)
- Attending Pathologist, Department of Pathology, Yale-New Haven Hospital. New Haven, CT (July 1, 2003 – December 31, 2009)
- Attending Pathologist, Department of Pathology, Bridgeport Hospital. Bridgeport, CT (July 1, 2003 – December 31, 2009)

Teaching Experience:

- Lecturer, Bone and Soft Tissue Pathology, second-year medical students, Medical College of Wisconsin. Milwaukee, WI (since January 2010)
- Lecturer, Pediatric Pathology Overview and Developmental Disorders of the Musculoskeletal System. General Principles of Pathology Course for first-year medical students, Yale University School of Medicine (2008-2009)
- Director, Pathology labs and lectures. Cardiovascular Module, Mechanism of Disease Course, Yale University School of Medicine. New Haven, CT (2006-2009)
- Lecturer, Pathology of Pediatric Solid Tumors. Seminar series for Pediatric Oncology Attendings, Fellows and Advanced Practitioners, Department of Pediatrics, Yale University School of Medicine (2008-2009)
- Co-leader, Pathology Course Tutorials for second-year medical students, Yale University School of Medicine (2003-2007)
- Lecturer, Cardiovascular Pathology. Pathology Lecture series for first-year students, Physician Associate Program, Yale University School of Medicine (2003-2009)
- Head Professor of Biology, Faculty of Medical Sciences, Universidad Católica de Santiago de Guayaquil (UCSG) (March 1996 – June 1997)
- Visiting Professor of Biology, Faculty of Medical Sciences, Universidad Católica de Santiago de Guayaquil (UCSG) (March 1995 - March 1996)
- Invited Professor of Biology. Undergraduate Faculty of Medical Sciences. Universidad Católica de Santiago de Guayaquil (UCSG) (July - September 1993)

Administrative Experience:

- Director, Surgical Pathology, Department of Pathology, Medical College of Wisconsin. Milwaukee, WI (since January 1, 2010)
- Director, Musculoskeletal Pathology Service, Department of Pathology, Medical College of Wisconsin. Milwaukee, WI (since January 1, 2010)

- Director, Orthopaedic Pathology, Department of Pathology, Yale University School of Medicine. New Haven, CT (July 1, 2009 – December 31, 2009)
- Director, Pediatric and Developmental Pathology, Department of Pathology, Yale University School of Medicine. New Haven, CT (July 1, 2008 – December 31, 2009)
- Associate Director, Anatomic Pathology Residency Program, Department of Pathology, Yale University School of Medicine. New Haven, CT (November 2008 – November 2009)
- Assistant Director, Autopsy Service, Department of Pathology, Yale University School of Medicine. New Haven, CT (July 1, 2007 – December 31, 2009)
- Secretary/ Treasurer, Latin American Pathology Foundation (LAPF) (March 2006 – March 2009) and Manager of the LAPF website (since February 2008)
- Member, Residency Selection Committee, Department of Pathology, Yale-New Haven Hospital, Yale University School of Medicine. New Haven, CT (2004-2005, 2006-2007 and 2008-2009)
- Administrative Chief Resident, Department of Pathology, Yale-New Haven Hospital, Yale University School of Medicine. New Haven, CT (July 2001 - June 2002)
- Inspector (# 705549), for the College of American Pathologists (May 2001 and September 2004)
- Acting Director, *Instituto de Biología Molecular Tropical* [Institute of Tropical Molecular Biology] (IBMT), Universidad Católica de Santiago de Guayaquil (UCSG), Guayaquil, Ecuador (August 1995 - May 1997)

Editorial Experience:

- Member, Editorial Board, *Annals of Diagnostic Pathology* (since January 2010)
- Member, Scientific Committee, X Virtual Hispanic-American Anatomical Pathology Meeting (2009)
- Member, Editorial Board, *Pediatric and Developmental Pathology* [official Journal of the Society for Pediatric Pathology, ISSN 1093-5266 (printed version), ISSN 1615-5742 (electronic version)] (March, 2004-June, 2007)
- Reviewer, *Pediatric and Developmental Pathology* (2000-2004)
- Reviewer, *Journal of Medical Case Reports* (2008)
- Reviewer, *Histology and Histopathology* (2009)

SOCIETY MEMBERSHIPS:

- Fellow, College of American Pathologists (CAP)
- Member, American Medical Association (AMA)

- Member, United States and Canadian Academy of Pathology (USCAP)
- Member, Society for Pediatric Pathology (SPP)
 - Member, Nominating Committee, Society for Pediatric Pathology (2005-2008)
- Member, International Society of Bone and Soft Tissue Pathology (ISBSTP)
- Member, Arkadi M. Rywlin International Pathology Club
- Member, American Diabetes Association
- Associate Member, Endocrine Pathology Society (EPS)
- Member, Children's Hospital Boston Alumni Association
- Active Member and former Chair of Members Committee, Latin American Pathology Foundation (LAPF)
- Founding Member, *Dr. Roberto Gilbert Elizalde* Foundation, a foundation for the advancement and development of molecular biology in Guayaquil, Ecuador
- Associate Member, *Colegio Ecuatoriano de Cirujanos* [Ecuadorian College of Surgeons]
- Active Member, *Sociedad Ecuatoriana de Colo-Proctología* [Ecuadorian Society of Colo-Proctology]
- Former member, Board of Directors, *Hispanos Unidos*, a foundation for support and community programs for the Hispanic population with AIDS and other diseases, based in New Haven, CT (October 2000 - October 2001)

RESEARCH PROJECTS:

- ELGAN (Extremely Low Gestational Age Newborns): an NIH-funded, multi-institutional and interdisciplinary project, which attempts to determine the etiology and pathogenesis of immediate and long-term complications in very preterm newborns. Principal Investigator: Dr. Alan Leviton, Boston Children's Hospital, Harvard University.
- Targeting Placental Pathophysiology in IUGR and Preeclampsia: Ob/Gyn ARRA Award 2R01HD033909-12A2. Principal Investigator: Dr. Seth Guller, Department of Obstetrics, Gynecology and Reproductive Sciences, Yale University.
- sEGFR As a New Biomarker of Risk for Preterm Birth: submitted to Burroughs Wellcome Fund and to the Challenge Topic 04-HD-10: Identification of the Factors that Place Women at Risk for Preterm Birth. Principal Investigator: Dr. Nita Maihle, Departments of Obstetrics, Gynecology and Reproductive Sciences, Pathology and Pharmacology, Yale University.
- Theranostics for preventing oxidative stress and poor outcome of preterm neonates. R01 NIH grant application submitted. Principal Investigator: Dr. Catalin S Buhimschi, Department of Obstetrics, Gynecology and Reproductive Sciences, Yale University.
- Role of Toll-like Receptors and Glucocorticoids in Placental/Fetal Inflammation. R01 NIH grant application submitted. Principal Investigator: Dr. Seth Guller, Department of Obstetrics, Gynecology and Reproductive Sciences, Yale University.

- Function of TLRs throughout gestation. R01 NIH program grant application submitted. Principal Investigator: Dr. Gil Mor, Department of Obstetrics, Gynecology and Reproductive Sciences, Yale University.
- Ceruloplasmin as an early marker for pre-eclampsia. In collaboration with Dr. Seth Guller from the Department of Obstetrics, Gynecology and Reproductive Sciences, Yale University.

PRESENTED LECTURES AND SEMINARS:

- "Introductory Course to Molecular Biology", at the Faculty of Medical Sciences, Universidad Católica de Santiago de Guayaquil (UCSG), Guayaquil, Ecuador (September 20-24, 1993)
- "Oncogenes: Structure, Mechanisms of Activation, and the Role of Tumor Suppressor Genes as Carcinogenic Factors", at the National Institute of Oncology, Ecuadorian Society for the Fight Against Cancer (SOLCA), Guayaquil, Ecuador (April, 1995)
- Seminar "Introduction to Genetics in Medical Oncology", at the National Institute of Oncology, Ecuadorian Society for the Fight Against Cancer (SOLCA), Guayaquil, Ecuador (June 12 -23, 1995)
- "Molecular Biology of Cancer", at the VIII National Congress of Pathology; VI Ecuadorian Congress of Clinical Pathology; I Ecuadorian Congress of Laboratory Medicine, SOLCA Hospital, Cuenca, Ecuador (August 1-5, 1995)
- "Applications of Molecular Biology in Medicine", at the III Course "Selected Topics in Pediatrics", Faculty of Medicine and Post-Graduate School, Universidad Católica de Santiago de Guayaquil (UCSG), Guayaquil, Ecuador (August 12, 1995)
- "Molecular Biology Workshop", "Applications of Molecular Biology in Tumors", and "Advances in the Diagnosis of Tropical Diseases by Molecular Biology", at the Seminar "Interpretation of Tumors and Tropical Diseases by Electron Microscope and Molecular Biology", National Institute of Hygiene and Tropical Medicine, Guayaquil, Ecuador (September 26-28, 1995)
- "Molecular Biology of Cancer", at the "Dr. Francisco Leone Divanna" II Biennial Medical Conference; II International Congress of Obstetrics and Gynecology, IESS Regional 2; I Congress of Post-Graduate Residents on Obstetrics and Gynecology. Dr. Teodororo Maldonado Carbo Regional Hospital of the Ecuadorian Institute of Social Security (IESS), Guayaquil, Ecuador (October 10- 13, 1995)
- "Applications of Molecular Biology in Medicine", and participated in the round table discussion at the symposium "Molecular Genetics and Psychiatry", Lorenzo Ponce Psychiatric Hospital, Guayaquil, Ecuador (October 16- 19, 1995)

- "Proto-oncogenes and Oncogenes", "Mechanisms of Activation of Proto-oncogenes", and "Anti-oncogenes", at the symposium "Current Topics in Molecular Biology of Cancer", Ecuadorian Oncology Research Group (GOIE), Dr. Teodoro Maldonado Carbo Regional Hospital of the Ecuadorian Institute of Social Security (IESS), Guayaquil, Ecuador (December 14, 1995)

- "Molecular Biology: Basic Concepts. Diagnostic and Therapeutic Applications", at the Academic Activity for Scholar Post-Graduate Clinical Oncology Residents, National Institute of Oncology, Ecuadorian Society for the Fight Against Cancer (SOLCA), Guayaquil, Ecuador (July 11, 1996)

- "Growth Factors", and "Oncogenes - Anti-oncogenes", at the III International Course of Oncology, Ecuadorian Oncology Research Group (GOIE), Dr. Teodoro Maldonado Carbo Regional Hospital of the Ecuadorian Institute of Social Security (IESS), Guayaquil, Ecuador (October 2, 1996)

- "Molecular Pathology of Cancer: from Morphology to Biology" and chaired the round table discussion, at the First International Course on Applications of Molecular Biology in Medicine, Institute of Tropical Molecular Biology, Universidad Católica de Santiago de Guayaquil (UCSG), Guayaquil, Ecuador (August 31-September 4, 1998)

- "Molecular Pathology of Cancer: from Morphology to Biology", at the National Institute of Oncology, Ecuadorian Society for the Fight Against Cancer (SOLCA), Guayaquil, Ecuador (September 4, 1998)

3 - "The Role of Molecular Pathology in the Delineation of New Entities: Clear Cell Papillary Renal Cell Carcinoma and Alveolar Soft Part Sarcoma", at the Molecular Pathology Symposium of the XXIII Latin American Congress of Pathology, Latin American Society of Pathology (SLAP), Managua, Nicaragua (November 25-30, 2001)

- "Skeletal Dysplasias", at the Pediatric Pathology Course, I National Congress of the Anatomic Pathology Federation of the Mexican Republic, and XLV National Congress of the Mexican Association of Pathologists, Ixtapa, México (May 1- 4, 2002)

- "Sclerosing Rhabdomyosarcoma", at the Pediatric Surgical Pathology Seminar of the XXIV Latin American Congress of Pathology, Latin American Society of Pathology (SLAP), Quito, Ecuador (October 20-24, 2003)

- "Current Topics in Pediatric Surgical Pathology: Sclerosing Rhabdomyosarcoma", at the XLVI National Meeting "Dr. Jose Angel Suarez", Venezuelan Society of Anatomic Pathology, Caracas, Venezuela (November 13-15, 2003)

- "Sclerosing Rhabdomyosarcoma in Children", "Abnormal Distribution and Hyperplasia of Thyroid C-cells in PTEN-associated Tumor Syndromes" and "Chromosomal Rearrangements in Subungual (Dupuytren's) Exostosis and Bizarre Parosteal Osteochondromatous Proliferation", at the II Atlantic Conference on Cancer, Santa Cruz de Tenerife, Canary Islands, Spain (February 12-14, 2004)

- “Cytogenetics and Molecular Biology in Childhood Neoplasias”, at the Pathology and Cytogenetics Workshop “ONCO ’04: Canarias Contra el Cáncer”, Puerto del Rosario, Fuerteventura, Canary Islands, Spain (February 15-18, 2004)
- Pediatric Pathology Seminar, IV National Congress of the Anatomic Pathology Federation of the Mexican Republic, and XLVII National Congress of the Mexican Association of Pathologists, Cancún, México (May 1- 4, 2004)
- “Applications of Molecular Biology and Cytogenetics Techniques in the Diagnosis of Pediatric Tumors”, at the I Iberoamerican Surgical Pathology and Molecular Oncopathology Meeting, and VII Venezuelan Pathology Congress “Dr. Alberto Angulo Ortega”, Venezuelan Society of Anatomic Pathology, Caracas, Venezuela (November 17-20, 2004)
- “Applications of Molecular Biology and Cytogenetics in Pediatric Tumors”, at the Fourth Asia Pacific Meeting of the International Academy of Pathology, Beijing, China (August 22-26, 2005)
- “Applications of Molecular Biology and Cytogenetics in Pediatric Tumors”, at the III Andean Pathology Meetings of the Medical College of Mérida “Dra. Ana Dávila de Arreaga”, Mérida, Venezuela (November 18-19, 2005)
- “Applications of Molecular Biology and Cytogenetics in Pediatric Tumors” and “Importance of Immunohistochemistry in the Diagnosis of Pediatric Tumors”, at the Hospital of Pediatric Specialties, Maracaibo, Venezuela (March 20-21, 2006)
- “Immunohistochemistry in the Diagnosis of Pediatric Tumors”, at the I Andean Pediatric Oncology Meeting of the Autonomous Institute of the University Hospital of Los Andes, Mérida, Venezuela (March 22-25, 2006)
- “Applications of Molecular Biology and Cytogenetics in Pediatric Tumors” and “Molecular Aspects of Non-Neoplastic Pediatric Pathology”, at the Second Atlantic Molecular Pathology Conference, Fuerteventura, Canary Islands, Spain (June 8-10, 2006)
- “Applications of Molecular Biology and Cytogenetics in Pediatric Tumors”, at the Instituto Oncológico Nacional- SOLCA and at the Hospital Luis Vernaza, Guayaquil, Ecuador (June 17 and 20, 2006)
- “Molecular Biology and Cytogenetics in Pediatric Solid Tumors”, at the Young Talents of Pathology seminar series, Children’s Hospital of Philadelphia, PA, USA (February 28, 2007)
- “Molecular and Surgical Pathology of Undifferentiated Small Cell Pediatric Tumors: An Update” and “Bone Tumors: Diagnostic Criteria and Update”, at the III Anatomic Pathology Update Meeting (organized by the Medical College of Wisconsin), Guayaquil, Ecuador (August 1-3, 2008)
- “Immunohistochemical Analysis of Small Round Blue Cell Tumors and Soft Tissue Neoplasms”, Histologic Prognostic Factors in Pediatric Solid Tumors” and Round Table, at the Integrated Oncology Meeting of the Venezuelan Society of Oncology, Caracas, Venezuela (October 10-12, 2008)

- “Soft Tissue Pathology I: Benign Myxoid Neoplasms”, “Soft Tissue Pathology II: Malignant Myxoid Neoplasms” and “Undifferentiated Soft Tissue Tumors Seminar”, at the XI Venezuelan Pathology Congress of the Venezuelan Society of Anatomic Pathology, Barquisimeto, Venezuela (October 23-25, 2008)

- Co-Chair at the Society for Pediatric Pathology Spring Meeting Platform Presentations, Boston, MA, USA (March 7, 2009)

- Bone and Soft Tissue Pathology, Unknown Slide Conference, Surgical Pathology Residents, Department of Pathology, Medical College of Wisconsin, Milwaukee, WI, USA (August 27, 2009)

PUBLICATIONS:

Theses and Dissertation:

High School Baccalaureate Chemistry and Biology Specialty thesis: "Chromosomopathies", Colegio Salesiano Cristóbal Colón, Guayaquil, Ecuador (November, 1983)

Medical Doctorate dissertation: "Long term effects of cyclosporine on renal function in cadaveric kidney recipients on double vs. triple immunosuppressive therapy". Project performed at Jackson Memorial Medical Center, University of Miami, Florida, and presented at the Universidad Católica de Santiago de Guayaquil (UCSG), Guayaquil, Ecuador (April, 1992)

Master of Science thesis: "Characterization of mutations on the adenylosuccinate lyase (ASL) gene in patients with ASL deficiency". Project performed at the Center for Human Genetics, Gasthuisberg University Hospital, Leuven, Belgium, and presented at the Inter-University Post-Graduate Programme of Tropical Molecular Biology, Faculty of Sciences, Free University of Brussels, Belgium (September, 1994)

Abstracts:

Roth D, Fernández J, Zambrano E, Burke G, Nery J, Esquenazi V, Miller J. (1992) Long term double vs. triple immunosuppressive therapy for cadaveric renal recipients. *Journal of the American Society of Nephrology*, **2**, p 815.

Zambrano E, El-Hennawy M, Ehrenkranz R, Reyes-Múgica M. (2001) Total parenteral nutrition (TPN)-induced liver pathology. An autopsy series of 25 newborn cases. *Laboratory Investigation*, **81**, No.1, and in *Modern Pathology*, **14**, No. 1.

Zambrano E, Reyes-Múgica M. (2001) **Hormonal activity may predict aggressive behavior in neuroblastoma.** *Laboratory Investigation*, **81**, No.1, and in *Modern Pathology*, **14**, No. 1.

Zambrano E, Rosai J, Reyes-Múgica M. (2001) **Sarcoma de células claras primario en intestino delgado: un simulador de tumor gastrointestinal estromal (GIST) [Primary**

small bowel stromal sarcoma: a gastrointestinal stromal tumor (GIST) simulator]. *Patología (Mex)* 39: S13.

El-Hennawy M, Zambrano E, Reyes-Múgica M, Ehrenkranz R. (2001) Relationship between clinical risk factors and pathological findings of liver injury in neonates receiving total parenteral nutrition (TPN). *Pediatric Research*, 49: 398A.

Zambrano E, Nose V, Richkind K, Gebhardt M, Hresko M, Kleinman P, Perez-Atayde A, Kozakewich H. (2003) Distinct chromosomal rearrangements in Dupuytren's exostosis and Nora's lesion. *Laboratory Investigation*, **83**, No.1: 8P, and in *Modern Pathology*, **16**, No. 1.

Zambrano E, Holm I, Pilarski RT, Perez-Atayde A, Kozakewich H, Shamberger RC, Nose V. (2003) Abnormal distribution and hyperplasia of thyroid C-cells in Cowden's disease (CD)/Bannayan-Ruvalcaba-Riley Syndrome (BRRS). *Laboratory Investigation*, **83**, No.1: 8P, and in *Modern Pathology*, **16**, No. 1.

Zambrano E, Perez-Atayde A, Ahrens W, Reyes-Múgica, M. (2004) Sclerosing rhabdomyosarcoma in children. *Laboratory Investigation*, **84**, No.2: 277, and in *Modern Pathology*, **17**, No.2: 275.

Zambrano E, Dotto J, Barrón LP, Reyes-Múgica M. (2005) The placenta as a fetal shield: lack of correlation between severe placental lesions and Apgar scores, or, behind every healthy baby there may or may not be a healthy placenta. *Laboratory Investigation*, **85**, No.2 and *Modern Pathology*, **18**, No. 2: 313.

Guo H, Zambrano E, Chi B, Gutiérrez MC, Yee H, Drut M, Drut R, Askin F, Reyes-Múgica M, Greco MA. (2005) Overexpression of epidermal growth factor receptor (EGFR) in congenital cystic airway malformation (CCAM) type I. *Laboratory Investigation*, **85**, No.2 and *Modern Pathology*, **18**, No. 2: 304.

Stock F, Cammarata Scalisi F, Zambrano E, Milano M. (2005) Tumor desmoplástico de células redondas pequeñas. Reporte de un caso en adolescente femenino [Desmoplastic small round blue cell tumor. Report of a case in an adolescent female patient]. *Archivos Venezolanos de Puericultura y Pediatría*, **68** (S1):5.

Stock F, Cammarata F, Castillo A, Gordon O, Zambrano E, Petrosino O, Arenas A, Milano M. (2005) Carcinoma epidermoide metastásico de origen incierto en un escolar masculino de 12 años [Metastatic squamous cell carcinoma of uncertain origin in a 12-year-old boy]. *Dermatología Venezolana*, **43**(4):24.

Sarita-Reyes C, Reyes-Múgica M, Zambrano E (2006) Distinguishing amniotic bands from fetal skin by expression of cytokeratins in the diagnosis of amniotic band disruption sequence (ABS). *Laboratory Investigation*, **86**, No. 2 and *Modern Pathology*, **19**, No. 2: 332-333.

Sarita-Reyes C, Zambrano E, Dotto J, Reyes-Múgica M. Indoleamine 2,3-Dioxygenase Appears Normally Distributed in Placental Lesions Associated with Increased Risk of Loss of Pregnancy. A Preliminary Study. Presented as poster at the International Academy of Pathology in Montreal, Canada, September 16-21, 2006.

Zambrano E, Cajaiba M, Sarita-Reyes C, Reyes-Múgica M. Marked Elevation of Serum Alpha-Feto Protein in Patients with Beckwith-Wiedemann Syndrome (BWS) does not necessarily mean Hepatoblastoma. Presented as poster at the International Academy of Pathology in Montreal, Canada, September 16-21, 2006.

Sarita-Reyes C, Pashankar D, Reyes-Múgica M, Zambrano E. Microvillous Inclusion Disease (MID) in an Infant with Coarctation of the Aorta. Morphological, Histochemical, Immunohistochemical and Ultrastructural Features of a Rare Congenital Disorder in a Previously Unreported Association. Presented as poster the International Academy of Pathology in Montreal, Canada, September 16-21, 2006.

Borys D, Cajaiba MM, Reyes-Múgica M, Zambrano E, Guo H, Yee H, Gutierrez MC, Drut R, Drut RM, Askin F, Greco MA. Screening for K-Ras Mutations in Congenital Cystic Airway Malformation (CCAM) of the Lung. Presented as poster at the International Academy of Pathology in Montreal, Canada, September 16-21, 2006.

De Stefano D, Zambrano E. Hypoplastic Right Heart Syndrome in Monozygotic Twins. Presented as poster at the International Academy of Pathology in Montreal, Canada, September 16-21, 2006.

Buhimschi C, Bhandari V, Zhao G, Rosenberg VA, Zambrano E, Cackovic M, Funai E, Buhimschi IA. (2007) Evidence for a role of inflammation in control of angiopoietin-1, angiopoietin-2 and of their novel antagonist soluble Yie-2 in pregnancies complicated by intra-amniotic inflammation. *American Journal of Obstetrics and Gynecology*, **197**(6), Supplement 1: S67. Presented at the Society for Maternal-Fetal Medicine: 2008 28th Annual Meeting - The Pregnancy Meeting.

Ziai J, French CA, Zambrano E. NUT-Associated Carcinoma in the Salivary Gland of a Pediatric Patient. Presented as poster at the CAP Meeting, Washington DC, October 11-14, 2009. October issue of *Archives of Pathology and Laboratory Medicine*.

Van Patten K, Ornstein DL, Li P, McCabe M, Zambrano E. Fulminant gamma/delta T-cell lymphoma presenting as acute appendicitis: a post-mortem study. Presented as poster at the CAP meeting, Washington DC, October 11-14, 2009. October issue of *Archives of Pathology and Laboratory Medicine*.

Zambrano H, Areán-Cuns C, Vigliotti V, Lee SH, Zambrano E. Identification of Human Papillomavirus (HPV) Genotypes in Pediatric Laryngeal Papillomatosis (PLP), to be presented as Platform Presentation at the Society for Pediatric Pathology Meeting in March 20, 2010, Washington, D.C.

Case Reports:

Zambrano E, Marshalko S, Jaffe C, Hui P. (2002) Isolated non-ventricular myocardial compaction: clinical and molecular aspects of a rare cardiomyopathy. *Laboratory Investigation*, **82**: 117-122.

Zambrano E, Reyes-Múgica M. (2003) Renal cell carcinoma with t(X;17): singular pediatric neoplasm with specific phenotype/ genotype features. *Pediatric and Developmental Pathology*, **6**(1): 84-87.

Zambrano E, Esper F, Rosenberg R, Kim J, Reyes-Múgica M. (2003) Chronic granulomatous disease. *Pediatric and Developmental Pathology*, **6**(6): 577-581.

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Zambrano E, Mejía-Mejía O, Bifulco C, Shin J, Reyes-Múgica M. (2006) Extranodal marginal zone B-cell lymphoma/ maltoma of the lip in a child. Case report and review of cutaneous lymphoid proliferations in childhood. *International Journal of Surgical Pathology*, **14**(2):163-169.

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Theoharis CGA, Carling T, Buza N, Zambrano E, Sosa JA. (2008) Multinodular Goiter and Primary Hyperparathyroidism: A Circuitous Route to Diagnosing Metastatic Uveal Melanoma. *Endocrine Pathology*, **19**(4):294-8.

Moliterno JA, Sood S, Zambrano E, Kim JH, Piepmeier JM, Baehring JM. (2009) Intracranial Benign Fibrous Histiocytomas: A Case Report and Review. *Journal of Neuro-Oncology J Neurooncol*, **92**(2):203-209.

Esquibies AE, Zambrano E, Ziai J, Kesebir D, Touloukian RJ, Egan ME , Reyes-Múgica M, Bazy-Asaad A. (2010) Pulmonary Squamous Cell Carcinoma Associated with Repaired Congenital Tracheoesophageal Fistula and Esophageal Atresia. *Pediatric Pulmonology*, **45**(2):202-4.

Ziai J, French CA, Zambrano E. NUT gene rearrangement in a poorly-differentiated carcinoma of the submandibular gland. *Head and Neck Pathology*. In press.

León-Ferré R, Friedlaender G, Vanegas T, Zambrano E. Post-radiation osteosarcoma in two young patients: Case reports and review of literature. In preparation.

Malhotra Y and Fitzgerald TN, Diefenbach KA, Harper H, Zambrano E, Cicero S, Moss RL, Bhandari V. A curious case of hemoperitoneum in a neonate: Case report and a review of rhabdoid tumors. In preparation.

Review Articles:

Ruiz JC, Zambrano EV, Ruiz EA. (1995) Análisis de asociación genética [Linkage analysis]. *Revista Científica Medicina* (ISSN 1390-0218), **1**, No. 3, 104- 109.

Zambrano EV. (1996) Biología molecular del cáncer [Molecular biology of cancer]. *Oncología* (ISSN 1390-0110), **6**, No. 2, 181-188.

Zambrano-Tola E. (1996) Mecanismos moleculares de activación oncogénica [Molecular mechanisms of oncogenic activation]. *Oncología* (ISSN 1390-0110), **6**(4):390-6.

Zambrano-Tola E, Merino-Espinoza M. (1997) Técnicas de diagnóstico molecular [Molecular diagnostic techniques]. *Oncología* (ISSN 1390-0110), **7**(2):137-42.

Camelo-Piragua SI, Zambrano E, Pantanowitz L. Langerhans cell histiocytosis. *Ear, Nose and Throat Journal* (in press).

Original Papers:

Zambrano EV, Cuppens H, Legius E, Ruiz JC, Cassiman JJ. (1996) Caracterización de mutaciones en el gen de la adenilosuccinato liasa (ASL) en un paciente con epilepsia, retardo psicomotor y autismo [Characterization of mutations in the adenylosuccinate lyase gene (ASL) in a patient with epilepsy, psychomotor retardation and autism]. *Revista Científica Medicina* (ISSN 1390-0218), **2**, No. 2, 99-104.

Zambrano-Tola E, Merino-Espinoza M. (1996) Estudio de familias (pedigree) de pacientes con hemofilia A, fibrosis quística y síndrome del cromosoma X frágil, identificados en hospitales de la ciudad de Guayaquil [Family studies (pedigree) of patients with hemophilia A, cystic fibrosis and fragile X syndrome, identified from hospitals in the city of Guayaquil]. *Revista de Investigación de la Universidad Católica de Santiago de Guayaquil*, **9**, 7-30.

Marie E, Cuppens H, Heuterspreute M, Jaspers M, Zambrano-Tola E, Gu XX, Legius E, Vincent MF, Jaeken J, Cassiman JJ, Van den Berghe G. (1999) Mutation analysis in adenylosuccinate lyase deficiency: eight novel mutations in the re-evaluated full ADSL coding sequence. *Human Mutation*. **13**: 197-202.

Zambrano E, Reyes-Múgica M. (2002) Hormonal activity may predict aggressive behavior in neuroblastoma. *Pediatric and Developmental Pathology*. **5** (2): 190-199.

Zambrano E, Reyes-Múgica M, Franchi A, Rosai J. (2003) An osteoclast-rich tumor of the gastrointestinal tract with features resembling clear cell sarcoma of soft parts: reports of six cases of a GIST simulator. *International Journal of Surgical Pathology*. **11**(2):75-81.

Zambrano E, Holm I, Glickman J, Huang S, Perez-Atayde A, Kozakewich HPW, Shamberger RC, Nosé V. (2004) Abnormal distribution and hyperplasia of thyroid C-cells in PTEN-associated tumor syndromes. *Endocrine Pathology*. **15**(1):55-64.

Zambrano E, Nose V, Richkind K, Gebhardt M, Hresko M, Kleinman P, Perez-Atayde A, Kozakewich H. (2004) Distinct chromosomal rearrangements in Dupuytren's exostosis and Nora's lesion. *American Journal of Surgical Pathology*. **28**(8): 1033-1039.

Zambrano E, El-Hennawy M, Ehrenkranz R, Reyes-Múgica M. (2004) Total parenteral nutrition (TPN)-induced liver pathology. An autopsy series of 24 newborn cases. *Pediatric and Developmental Pathology*. **7**(5): 425-432.

Zambrano E, Pérez-Atayde A, Ahrens W, Reyes-Múgica M. (2006) Pediatric Sclerosing Rhabdomyosarcoma. *International Journal of Surgical Pathology*. **14**(3): 193-197.

Cajaiba MM, Sarita-Reyes C, Zambrano E, Miguel Reyes-Múgica. (2007) Mesenchymal Hamartoma of the Liver Associated with Beckwith-Wiedemann Syndrome Features and High Serum Alpha-fetoprotein Levels. *Pediatric and Developmental Pathology*. **10**(3): 233-238.

Kenney B, Richkind KE, Zambrano E. (2007) Solid Variant of Aneurysmal Bone Cyst with a Novel (X;9) Translocation. *Cancer Genetics and Cytogenetics*. **178**(2):155-159.

Hecht JL, Kliman HJ, Allred EN, Pflueger SMV, Chang CH, Doss B, Roberts D, Livasy C, Bhan I, Zambrano E, Ross DW, Senagore P, Husain A, Leviton A. (2007) Reference weights for placentas delivered before the 28th week of gestation. *Placenta*. **28**(10):987-990.

Kenney B, Richkind KE, Friedlaender G, Zambrano E. (2007) Chromosomal Rearrangements In Lipofibromatosis. *Cancer Genetics and Cytogenetics*. **179**:136-139.

Kim J, Zambrano E, McNiff JM. (2007) Congenital Panfollicular Nevus Associated with Polydactyly. *Journal of Cutaneous Pathology*. **34** (Suppl. 1):14-17.

De Stefano D, Peining L, Xiang B, Hui P, Zambrano E. (2008) Pulmonary atresia with intact ventricular septum (PA-IVS) in monozygotic twins. *Am J Med Genet A*. **146A**(4):525-528.

Buhimschi IA, Zambrano E, Pettker CM, Bahtiyar MO, Paidas M, Rosenberg VA, Thung S, Salafia CM, Buhimschi CS. (2008) Using proteomic analysis of the human amniotic fluid to identify histological chorioamnionitis. *Obstet Gynecol*. **111**(2):403-412.

Hecht JL, Onderdonk A, Delaney M, Allred EN, Kliman HJ, Zambrano E, Solveig P, Livasy C, Bhan I, Leviton A. (2008) Characterization of chorioamnionitis in second trimester c-section placentas and correlation with microorganism recovery from sub-amniotic tissues. *Pediatr Dev Pathol*. **11**(1):15-22.

Gathungu GN, Pashankar DS, Sarita-Reyes CD, Zambrano E, Reyes-Mugica M, Brueckner M, Mistry PK, Husain SZ. (2008) Microvillus Inclusion Disease Associated With Coarctation of the Aorta and Bicuspid Aortic Valve. *J Clin Gastroenterol*. **42**(4):400-403.

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Buhimschi CS, Abdel-Razeq S, Cackovik M, Pettker CM, Dulay AT, Mert-Ozan B, Zambrano E, Martin R, Norwitz ER, Bhandari V, Buhimschi IA. (2008) FHR monitoring patterns in women with amniotic fluid proteomic profiles indicative of inflammation. *American Journal of Perinatology*, **25**(6):359-372.

Guller S, Buhimschi CS, Ma YY, Huang STJ, Yang L, Kuczynski E, Zambrano E, Lockwood CJ, Buhimschi IA. (2008) Placental Expression of Ceruloplasmin in Pregnancies with Severe Preeclampsia. *Laboratory Investigation*, **88**:1057–1067.

McElrath TF, Hecht JL, Dammann O, Boggess K, Onderdonk A, Markenson G, Harper M, Delpapa E, Allred EN, Leviton A; ELGAN Study Investigators. (2008) Pregnancy disorders that lead to delivery before the 28th week of gestation: an epidemiologic approach to classification. *Am J Epidemiol*, **168**(9):980-989.

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Book Chapters:

Astudillo-De la Vega H, Zambrano E. (2008) “New Strategies in the Diagnosis and Treatment of Cancer”, In: *Molecular Biology of Cancer*, Clínicas Oncológicas de Iberoamérica Series, México DF, México, 264 pp.

León-Ferré R, Areán-Cuns C, Zambrano E. (2009) “Cytogenetic and Molecular Aspects of Bone and Soft Tissue Neoplasms”, In: *Avances en Patología*, 5th ed, Ed. Cabildo de Fuerteventura, Spain.

León-Ferré R, Areán-Cuns C, Zambrano E. (2009) “Genetic Syndromes Associated with Sarcomas”, In: *Avances en Patología*, 5th ed, Ed. Cabildo de Fuerteventura, Spain.

Textbooks:

Zambrano-Tola, Eduardo (1996) *Introducción a la Biología Molecular* [Introduction to Molecular Biology], 1st ed., Editorial Universitaria - Universidad Católica de Santiago de Guayaquil (UCSG), Guayaquil, Ecuador.

Name: ANTONIO ENTING LIM, JR.; Year of IPMB: SEPTEMBER 1995

Positions held since graduation: (dates, place&)

1. CONSULTANT FOR MICROBIOLOGY AND RESEARCH, DIVINE WORD HOSPITAL, TACLOBAN CITY, LEYTE PROVINCE, PHILIPPINES – FROM NOVEMBER 1, 1995 TO PRESENT
2. CHAIRMAN, DEPARTMENT OF MICROBIOLOGY AND PARASITOLOGY, COLLEGE OF MEDICINE, REMEDIOS T. ROMUALDEZ MEDICAL FOUNDATION (**RTRMF**), TACLOBAN CITY, LEYTE PROVINCE,

PHILIPPINES – FROM APRIL 1, 1996 – MAY 31, 2001 (CONCURRENT WITH OTHER JOBS OUTSIDE THIS MEDICAL COLLEGE)

3. VICE-CHAIRMAN OF THE BOARD, ST. THERESE EDUCATIONAL CENTER OF LEYTE (**STECL**), JUNE 1, 1998 TO AUGUST 31, 2004; THEN, CHAIRMAN OF THE BOARD FROM SEPTEMBER 2005 TO THE PRESENT
4. DEAN OF COLLEGE, ST. SCHOLASTICA'S COLLEGE OF HEALTH SCIENCES (**SSCHS**), TACLOBAN CITY, LEYTE PROVINCE, PHILIPPINES – FROM JUNE 1, 2000 TO PRESENT
5. LECTURER, TRAINOR, RESOURCE SPEAKER OF VARIOUS AGENCIES LIKE THE DEPARTMENT OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF EDUCATION, DEPARTMENT OF HEALTH OF THE PHILIPPINE GOVERNMENT
6. LECTURER, TRAINOR, RESOURCE SPEAKER OF VARIOUS PROFESSIONAL AND SCIENTIFIC ORGANIZATIONS LIKE PHILIPPINE ASSOCIATION OF MEDICAL TECHNOLOGISTS, PHILIPPINE SOCIETY FOR MICROBIOLOGY AND INFECTIOUS DISEASES, PHILIPPINE ASSOCIATION OF SCHOOLS OF MEDICAL TECHNOLOGY AND PUBLIC HEALTH, NATIONAL RESEARCH COUNCIL OF THE PHILIPPINES, AND OTHERS.
7. PRESIDENT, VICE-PRESIDENT, SECRETARY, INFORMATION OFFICER AND OTHER CAPACITIES OF VARIOUS PROFESSIONAL AND SCIENTIFIC ORGANIZATIONS, BOTH PROVINCIAL AND NATIONAL LEVELS
8. EVALUATOR AND ASSESSOR OF COLLEGES AND UNIVERSITIES UNDER THE DIRECTIVE OF THE PHILIPPINE COMMISSION FOR HIGHER EDUCATION

Major tasks:

1. AT **DIVINE WORD HOSPITAL**: CONSULTANT AT THE SECTION OF MEDICAL MICROBIOLOGY, DEPARTMENT OF PATHOLOGY, AND CONSULTANT OF MEDICAL RESIDENTS FOR THEIR RESEARCHES; SECRETARY OF THE EXECUTIVE COUNCIL OF THE HOSPITAL
2. AT **RTRMF**: SUPERVISE THE TEACHING ACTIVITIES OF MEDICAL PROFESSORS IN MICROBIOLOGY AND PARASITOLOGY; TEACH SECOND YEAR MEDICAL STUDENTS; SERVE AS PROMOTOR FOR MEDICAL RESEARCHES; MANAGES THE DEPARTMENT OF MICROBIOLOGY AND PARASITOLOGY
3. AT **STECL** : OFFICER OF THE SCHOOL BOARD WHO MAKE DECISIONS FOR THE OPERATION/MANAGEMENT OF THE SCHOOL
4. AT **SSCHS**: MANAGES THE ACADEMIC AFFAIRS OF THE COLLEGE; TEACHES MICROBIOLOGY, MOLECULAR BIOLOGY AND IMMUNOLOGY; CONDUCTS RESEARCH; SERVES AS PROMOTOR OF THESE

Did you finish a PhD ?: YES with Greatest Distinction

List of publications:

De Vos, D.; De Vos, P.; **Lim, A.E. Jr.**; Kersters, K. and Cornelis, P. Conservation of restriction sites in the amplified lipoprotein (OPRI) gene from *Pseudomonas aeruginosa*. *Belgian Journal of Botany*, 1992, 125 : 224 – 225.

Lim, A.E. Jr.; Brys, I.; Beschin, A.; De Vos, D.; De Baetselier, P.; Hamers, R. and Cornelis, P. Production and characterization of murine monoclonal antibodies against lipoprotein I from *Pseudomonas aeruginosa*. *Archives Internationales de Physiologie, Biochimie et de Biophysique*, 1993, 101 : B17.

De Vos, D.; **Lim, A.E. Jr.;** De Vos, P.; Sarniguet, A.; Kersters, K. and Cornelis, P. Detection of the outer membrane lipoprotein I and its gene in fluorescent and non-fluorescent pseudomonads: implications for taxonomy and diagnosis. *Journal of General Microbiology*, 1993, 139 : 2215 – 2223.

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Lim, A.E. Jr.; De Vos, D.; Brauns, M. Mossialos, D.; Gaballa, A.; Qing, D. and Cornelis, P. Molecular and immunological characterization of OprL, the 18 kDa outer membrane peptidoglycan lipoprotein (PAL) of *Pseudomonas aeruginosa*. *Microbiology*, 1997, 143 : 1709 – 1716.

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De Vos, D.; **Lim, A.E. Jr.;** Pirnay, J.P.; Struelens, M.; Vanderkelen, C.; Duinslaeger, L.; Vanderkelen, A. and Cornelis, P. Direct detection and identification of *Pseudomonas aeruginosa* in clinical samples such as skin biopsy specimens and expectorations by multiplex PCR based on two outer membrane lipoprotein genes, *oprI* and *oprL*. *Journal of Clinical Microbiology*, 1997, 35(6) : 1295 – 1299.

Lim, A.E. Jr. Structure and function of the Gram-negative bacterial cell envelope: focus on *Pseudomonas aeruginosa*. *RTRMF Journal*, 2000, 1 : 83 – 99.

Lim, A.E. Jr. *Capillaria philippinensis*: where is it now? *The Philippine Journal of Microbiology and Infectious Diseases*, 2000, 29(1) : 51 – 52.

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Abueva, N.C., **Lim, A.E. Jr.**, Blas, B.L., Reyes, E., Palomino, M.L.P. Human Intestinal *Capillaria philippinensis* Infection in Northern Leyte, Philippines. *Proceedings from the*

Annual Convention of the Philippine Society of Parasitology, Quezon City, April 2002, 27 : 3 - 4.

Lim, A.E. Jr., Alquiza, L.M. Human leptospirosis: Updates and insights from a Southeast Asian Regional Conference. *RTRMF Journal*, 2002, 2 : 77-85.

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Lim, A.E. Jr. *Individual and Small Group Activities for Learning Immunology: An Instructional Guide.* St. Scholastica's College of Health Sciences-Tacloban, 2005 : 45 pages.

Alquiza, L.M. and Lim, A.E. Jr. The current state of the art in the laboratory diagnosis of cryptosporidiosis. *The Philippine Journal of Medical Technology*, 2006, 9 : 1 – 7.

Lim, E.A.Jr. Herbal plants as medicine. *Leyte - Samar Daily Express*, 2007, No. 7, page 5.

Lim, A.E. Jr. Bacetriophages. *Leyte – Samar Daily Express*, 2008, No. 68, page 5.

Lim, A.E. Jr. Research translation for economic purposes. *Leyte – Samar Daily Express*, 2008, No. 165, p. 5.

Lim, A.E. Jr. *Pseudomonas aeruginosa* epidemiology, detection and future prospects (mini-review). *The SSCHS Journal* , 2009, 1 : 4 – 11.

Lim, A.E. Jr., Florento, L. and Alquiza, L.M. Molecular tools for the detection of some microbial and parasitic agents of human diseases. *The Philippine Journal of Medical Technology*, 2009, Vol. 12, in preparation.

Lim, A.E. Jr.; Arpon, E. and Opiniano, T.R. Sensitivity and resistance patterns of *Pseudomonas aeruginosa* isolated from patients in Eastern Visayas, Philippines. To be submitted to *Research in Microbiology Journal*, 2010.

Projects involved in:

Sensitivity and Resistance Patterns of Bacteria Isolated from Patients Admitted at Divine Word Hospital, Tacloban City, Philippines (on-going project from 1995 – present)

The Directly Observe Treatment Short Course (DOTS) Practice of Physicians in Eastern Visayas, Philippines (2007)

Anti-bacterial Effect Against Escherichia coli, Pseudomonas aeruginosa and Staphylococcus aureus of Commercially Available Fruit Juice Drinks in the Philippines (project was started in 2009)

Small Colony Variants of Staphylococcus aureus and Pseudomonas aeruginosa Isolated from Patients at Divine Word Hospital, Tacloban City, Philippines (project was just started in 2010)

Name: Dinesh C. Gautam; Year of graduation in IPMB: 1996

Positions held since graduation:

2008-to date Pharmacologist, Food and Drug Administration, Silver Spring, Maryland, USA

2007-2008 Research Fellow, National Institutes of Health (NIH) Bethesda, Maryland, USA

2002-2007 Visiting Research Fellow, NIH, Bethesda, Maryland, USA

1998-1999 Assistant professor, Department of Veterinary Pathobiology, Institute of Agriculture and Animal Science, Tribhuvan University, Nepal.

1997-1998 Veterinary Research Officer, Lumle Agricultural Research Center, Pokhara, Kaski, Nepal.

1996-1997 Assistant professor, Department of Veterinary Pathobiology, Institute of Agriculture and Animal Science, Tribhuvan University, Nepal

Major tasks: Pharmacological and toxicological aspect of drug review, Experienced in managing and handling different mutant mouse colonies; designing experiments, analyzing transgenic and mutant mice and statistical analysis of data; insulin tolerance test; knowledge of clamp study; glucose tolerance test; analysis of serum (FFA, triglyceride, insulin, glucagons etc); experience with different injection routes in mice (intramuscular, subcutaneous, intraperitoneal, intravenous); diet induced and GTG induced obesity and food intake etc.

Worked for more than nine years in the field of molecular endocrinology and physiology, particularly in the area of type 2 diabetes and obesity, metabolism, central and peripheral control of food intake, glucose and energy homeostasis, islets biology, beta-cell functions. Research studies were mainly focused on in vivo and in vitro physiological and pharmacological studies in transgenic and knockout mouse models.

Involved in research that characterizes both at the molecular and physiological levels, a series of mutant mice in which specific muscarinic acetylcholine receptors genes have been mutated, either conventionally or conditionally to understand the potential roles of muscarinic receptors in type 2 diabetes and obesity, and insulin secretion from pancreatic beta cells.

Did you finish a PhD?: Yes, in 2002 from University of Cologne, Germany.

List of publications:

1. Oh, C.-T., Gautam, D., Kim, M.-J., Choi, G., Kim, H.-P., Park, Y.-S., Hwang, S.-J., Suh, Y.-S., Cui, Y., Gavrilova, O., Lee, H.-Y., Cho, K.-S., Wess, J. and Han, S.-J. (2010). Muscarinic acetylcholine receptor mutants show extended life span in flies and mice. Submitted to Nature.

2. Wright, M.C., Potluri, S., Dentcheva, E., Gautam, D., Tessler, A., Wess, J., and Son, Y.-J. Distinct muscarinic acetylcholine receptor subtypes to stability and growth, but not compensatory plasticity, of neuromuscular synapses. *J Neurosci* 2009; 25;29(47):14942-55.
3. Guettier, J.-M., Gautam, D., Scarselli, M., Azua, I. R., Li, J.H., Rosemond, E., Ma, X., Armbruster, B., Lu, H., Roth, B. and Wess J. A chemical-genetic approach to study G protein regulation of \hat{I}^2 cell function in vivo. *Proc Natl Acad Sci U S A.* 2009; 10;106 (45):19197-202.
4. Li, J.H., Gautam, D., Han, S.-J., Guettier, J.M., Cui, Y., Lu, H., Deng, C., Hare, J., Jou, W., Gavrilova, O., Rossetti, L., Buettner, C. and Wess, J. Hepatic muscarinic acetylcholine receptors are not critically involved in maintaining glucose homeostasis in mice. *Diabetes* 2009; 58(12):2776-87.
5. Gautam, D., Jeon, J., Starost, M. F., Han, S.-J., Hamdan, F., Cui, Y., Parlow, A. F., Gavrilova, O., Szalayova, I., Mezey $\tilde{\%}$. and Wess J. Neuronal M3 muscarinic acetylcholine receptors are essential for somatotroph proliferation and normal somatic growth. *Proc Natl Acad Sci U S A.* 2009; 4;106(15):6398-403.
6. Gautam, D., Jeon, J., Li, J.H., Han, S.-J., Hamdan, F.F., Cui, Y., Lu, H., Deng, C., Gavrilova, O. and Wess, J. Metabolic Roles of the M3 Muscarinic Acetylcholine Receptor Studied with M3 Receptor Mutant Mice: *Journal of Receptors and Signal Transduction Research*, 2008; 28 (1-2): 93-108.
7. Gautam, D., Han, S.-J., Duttaroy, A., Mears, D., Hamdan, F.F., Li, J.H., Cui, Y., Jeon, J. and Wess, J. Role of the M3 Muscarinic Acetylcholine Receptor in β -cell function and glucose homeostasis. *Diabetes, Obesity and Metabolism*, 2007; 9 Suppl 2:158-69.
8. Zhang, H.-M., Zhou, H.-Y., Chen, S.-R., Gautam, D., Wess, J. and Pan H.-L. Control of Glycinergic input to spinal dorsal horn neurons by distinct muscarinic receptor subtypes revealed using knockout mice. *J Pharmacol Exp Ther*, 2007; 323(3): 963-71.
9. Wess, J., Eglen, R.M., and Gautam, D. Analysis of Muscarinic Receptor Mutant Mice: Implications for Drug Development. *Nature Reviews Drug Discovery* 2007; 6(9): 721-33.
10. Gautam, D., Duttaroy, A., Cui, Y., Han, S.-J. Deng, C., Seeger, T., Alzheimer, C. and Wess, J. M1-M3 muscarinic acetylcholine receptor-deficient mice: novel phenotypes. *J. Mol. Neurosci.* 2006; 30 (1-2):157-160.
11. Gautam, D., Gavrilova, O., Jeon, J., Pack, S., Jou, W., Cui, Y., Li, J.H. and Wess, J. Beneficial metabolic effects of M3 muscarinic acetylcholine receptor deficiency. *Cell Metabolism* 2006; 4(5): 363-375.
12. Origlia, N., Kuczewski, N., Aztiria, E., Gautam, D., Wess, J. and Domenica, L. Muscarinic acetylcholine receptor knockout mice show distinct LTP and LTD impairments in the visual cortex. *J Physiol.* 2006 15;577(Pt 3): 829-40.
13. Gautam, D., Han, S.-J., Hamdan, F.F., Jeon, J., Li, B., Li, J.H., Cui, Y., Mears, D., Lu, H., Deng, C., Heard, T., and Wess, J. A critical role for beta cell M3 muscarinic acetylcholine receptors in regulating insulin release and blood glucose homeostasis in vivo. *Cell Metabolism*, 2006; 3(6): 449-61.
14. Zhang, H.-M., Chen, R.S., Matsui, M., Gautam, D., Wess, J., and Pan, H.L. Opposing functions of spinal M2, M3 and M4 receptor subtypes in regulation of GABAergic inputs to dorsal horn neurons revealed by muscarinic receptor knockout mice. *Mol Pharmacol.* 2006;

69(3): 1048-55.

15. Kuczewski, N., Aztiria, E., Gautam, D., Wess, J. and Domenica, L. Acetylcholine (ACh) inhibits or enhances cortical synaptic transmission via different muscarinic receptors, as studied with receptor knockout mice. *J Physiol.* 2005; 566(Pt 3): 907-19.

16. Gautam, D., Han, S.-J., Heard T.S., Cui Y., Miller G., Bloodworth, L. and Wess, J. Cholinergic stimulation of digestive enzyme secretion from pancreatic acinar cells studied with muscarinic acetylcholine receptor mutant mice. *J Pharmacol Exp Ther.* 2005; 313(3): 995-1002.

17. Gautam, D., Heard, T.S., Cui, Y., Miller, G., Bloodworth, L., and Wess, J. Cholinergic stimulation of salivary secretion studied with M1 and M3 muscarinic receptor single and double knockout mice. *Molecular Pharmacology*; 2004; 66 (2): 260-267.

18. Duttaroy, A., Zimlik, C.L., Gautam, D., Cui, Y., Mears, D and Wess, J. Muscarinic stimulation of pancreatic insulin and glucagons release is abolished in M3 muscarinic acetylcholine receptor-deficient mice. *Diabetes.* 2004; 53(7): 1714-1720.

19. Schubert, M.*, Gautam, D.*, Surjo, D.*, Ueki, K, Baudler, S., Schubert, D., Kondo, T., Alber, J., Galldik, N., Kustermann, E., Arndt, S., Jacobs, A.H., Krone, W., Kahn, C.R., and Bruning, J.C. Role for neuronal insulin resistance in neurodegenerative diseases. *Proc. Natl. Aca. Sci. U S A.* 2004; 101(9): 3100-5. (*Authors contributed equally).

20. Rhl, M., Pasparakis, M., Baudler, S., Baumgartl, J., Gautam, D., Huth, M., De Lorenzi, R., Krone, W., Rajewsky, K., and Brning, J.C. Conditional disruption of IkappaB kinase 2 fails to prevent obesity-induced insulin resistance. *J Clin Invest.* 2004; 113(3): 474-81.

21. Brning, J.C., Gautam, D., Burks, D.J., Gillette, J., Schubert, M., Obran, P.C., Klein, R., Krone, W., Mller-Wieland, D. and Kahn, C.R. Role of brain insulin receptor in control of body weight and reproduction. *Science* 2000; 289: 2122-2125.

22. Truong, A.T, Mulders, M.N., Gautam, D.C., Ammerlaan, W., De Swart, R.L., King, C.C., Osterhaus, A.D. and Muller, C.P. Genetic analysis of Asian measles virus strains-new endemic genotype in Nepal. *Virus Res.* 2001; 76(1): 71-8.

23. Cote-Sierra, J., Jongert, E., Bredan, A., Gautam, D.C., Parkhouse, M., Cornelis, P., De Baetselier, P., and Revets, H. A new membrane bound OprI lipoprotein expression vector: high production of heterologous proteins in gra-9 bacteria and the implication for oral vaccination. *Gene* 1998; 221(1): 25-34.

MANUSCRIPT IN PREPARATION

1. Gautam, D. Doliba, N., Li J.H., Heard, T., Guettier, J.-M., Cui, Y., Lu, H., Matschinsky, F.M. and Wess, J. (2009). Persistent activation of b-cell M3 muscarinic acetylcholine receptors in transgenic mice greatly improves glucose tolerance and protects against diet-induced metabolic deficits. Submitted to *Diabetes* (under review).

BOOK CHAPTER

1. Jrgen Wess, Dinesh Gautam, Sung-Jun Han, Jongrye Jeon, Cuiling Li, and Chuxia Deng (2005). *Generation and Phenotypical Analysis of Muscarinic Acetylcholine Receptor*

Knockout Mice. In G Protein-Coupled Receptors: Structure, Function, and Ligand Screening", Page 113-136; Editors: Tatsuya Haga and Shigeki Takeda, CRC Press.

Name: Banshi Sharma; Year of graduation in IPMB: 1999

Positions held since graduation:

Senior veterinary officer, Central veterinary laboratory 2000-2005 and 2007- continue , Nepal, Chief of programme planning department of livestock services 2005-2007, Nepal. Major tasks: Diagnosis of avian influenza, cell culture and virus isolation.

Did you finish a PhD?: No

List of publications: No international publication.

Projects involved in: Strengthening of Veterinary Services for livestock Disease Control (EEC funded), Bird flu control project (World Bank funded) Currently, I'm doing applied research in Netherlands

Name: Tran Thanh Thu; Year of graduation in IPMB (TMB): 1996

Positions held since graduation: (dates, place&) :

- up to 2006: Main researcher in Laboratory of Plant Cell Biotechnology – Institute of Biotechnology – Vietnamese Academy of Sciences and Technology – Vietnam
- 2007 - postdoc in Laboratory of Plant Genetics – VUB – Belgium
- 1998-2002: Coordinator from Vietnam side for EC Project: " Genetics Engineering of Salt and Drought Tolerance in Rice Cultivars" DC-INCO DG XII- IC18CT980314

Major tasks:

- Main responsible for collaborative projects between Vietnam and Laboratory of Plant Genetics – VUB – Belgium

Did you finish a PhD?: yes; in 2007

List of publications:

(Since graduation of IPMB)

Roosens NH, **Thu Tran Thanh**, Yen L and Jacobs M (1997): Characterization of the mutation conferring salt tolerance in *N. plumbaginifolia*, and cloning of genes involved in the proline biosynthesis. *Archives of Physiology and Biochemistry* 199, B12. Mars 8

Roosens NH CJ, **Tran Thanh Thu**, Iskandar HM and Jacobs M (1998): Isolation of the ornithine- δ -aminotransferase cDNA and effect of salt stress on its expression in *Arabidopsis thaliana*. *Archives of Physiology and Biochemistry* 1998, 106, B24- Feb 21.

Roosens NH CJ, **Tran Thanh Thu**, Iskandar HM and Jacobs M (1998): Isolation of the ornithine- δ -aminotransferase cDNA and effect of salt stress on its expression in *Arabidopsis thaliana*. *Plant Phys.* 117. 263-271

Tran Thanh Thu and Jacobs M (2000): High efficient system for plant regeneration and gene transformation for pigeon pea [*Cajanus cajan* (L.) Millisp]. Abstract. International Workshop on Plant Biotechnology - Hanoi, Vietnam, July 19-25, 2000, p14

Jacobs M, Roosens N, Hien DT, Alemany B, Montesinos C, Mulet JM, Serrano R, Guiderdoni E, Van Boxtel J, Zheng HH, Binh LT, **Tran Thanh Thu** (2000): Genetic engineering of salt and drought tolerance in rice cultivars. Abstract. International Workshop on Plant Biotechnology. Hanoi, Vietnam, July 19-25, 2000. p15

Hien DT, Jacobs M, Roosens N, Alemany B, Montesinos C, Mulet JM, Serrano R, Guiderdoni E, Van Boxtel J, Zheng HH, LT Binh, **Tran Thanh Thu** (2000): Genetic engineering of salt and drought tolerance in rice cultivars. Abstract. 4th International Rice Genetics Symposium, 22-27 October 2000. IRRI

Binh LT, Phong DT, **Tran Thanh Thu**, Thao NP, Chau NH, Dac LX, Jacobs M, Muoi LT (2001): Improvement of water stress tolerance in rice by cell selection and genetic engineering. Abstract. Food security and environment protection in the new millenium, Society for the Advancement of Breeding Researches in Asia and Oceania, p314

Angenon G, Jacobs M, Roosens N, DT Hien, Montesinos C, Serrano R, Guiderdoni E, Van Boxtel J, Zheng HH, Gu H, Binh LT, **Tran Thanh Thu** (2002): Introduction of salt and drought tolerance genes in Chinese and Vietnamese rice cultivars. In "Abstract Book Congress RICEUCONF. Dissemination conference of current European research on rice, Torino (Italy), 6-8 Jun 2002.

Tran Thanh Thu, Deweale E, Mai TTX, Jacobs M and Angenon G (2002): Nutritional improvement of pigeonpea(*Cajanus cajan*. Abstract in Proceeding MFLBER 67(4) pp 301-303

Hien DT, Roosens N, Sagi B, Ahmed A, **Tran Thanh Thu**, Jacobs M and Angenon G (2002): Proline biosynthesis and genetic engineering to improve osmotic tolerance in *Nicotiana plumbaginifolia* and rice (*Oryza sativa*). In: "Abstract book Symposium 'Abiotic stress and signalization in plants' Biological Research Center of the Hungarian Academy of Sciences, Szeged, Hungary", 2002

Angenon G, **Tran Thanh Thu** and Dewaele E (2002): Modification of amino acid and protein composition of legume seeds. In abstract book "Grain legumes for sustainable agriculture" Strasbourg – France 26-28 September 2002

Tran Thanh Thu, Mai TTX, Dewaele E, Slama F, Tadesse Y, Angenon G and Jacobs M (2003): *In vitro* regeneration and transformation of pigeonpea [*Cajanus cajan* (L.) Millsp]. *Molecular Breeding* 11: 159-168

Hien DT, Jacobs M, Angenon G, Hermans C, **Tran Thanh Thu**, Son LV, Roosens NH (2003): Proline accumulation and D1-pyrroline-5-carboxylate synthetase gene properties in three rice cultivars differing in salinity and drought tolerance. *Plant Science* 165(5): 1059-1068

TRAN THANH THU, DEWEALE E, TRUNG LQ, JACOBS M AND ANGENON G (2003): LYSINE IMPROVEMENT IN THE SEEDS OF PIGEONPEA. AMINO ACIDS 25(2): 165

Jacobs M, Roosens N, Hien DT, Alemany B, Montesinos C, Mulet JM, Serrano R, Guiderdoni E, Van Boxtel J, Zheng HH, Binh LT and **Tran Thanh Thu** (2003): Genetic engineering of salt and drought tolerance in rice cultivars. In: Advances in rice genetics. Eds by Khush et al. pp 582-583

Chau NTH, **Tran Thanh Thu**, Jacobs M, Serrano R, Guiderdoni E, Binh LT (2004): Assessment for the drought tolerance of transgenic lines of Japonica rice cultivar Zhongzua. *J Biotechnology* 2: 93 - 100

Thanh Thu Tran, Dewaele E, Trung LQ, Mai TTX, Jacobs M and Angenon G (2004): Nutritional improvement of pigeonpea (*Cajanus cajan*). In "Conference handbook of the 5th European Conference on grain legumes. Dijon- France. June 2004- p. 203

Nguyen TV, **Thanh Thu Tran**, Claeys M and Angenon G (2004): *Agrobacterium*-mediated transformation of grain sorghum (*Sorghum bicolor* L.) for methionine and lysine improvement. In "Abstract book of the 3rd Plant Genomics European Meetings, Lyon, 2004. p. 164

Nguyen TV, **Thanh Thu Tran**, Claeys C and Angenon G (2004): Optimisation of *Agrobacterium*-mediated transformation for methionine and lysine improvement of grain sorghum (*Sorghum bicolor* L.). In "Abstract book of the 188th meeting of the Belgian Society of Biochemistry and Molecular Biology", 2004

Thanh Thu Tran, Dewaele E, Trung LQ, Danh LT and Angenon G (2006): *Medicago truncatula* - a model legume plant to study amino acid metabolism. In "Abstract book of the GLIP annual meeting 2006; INRA - Montpellier, France; 20-23 February 2006", 2006

Tran Thanh Thu, Dewaele E, Trung LQ, Danh LT and Angenon G (2006): Unique properties of lysine metabolism in leguminous plants. Abstract. 8th International Congress of plant molecular Biology. Adelaide –Australia –2006, p141

Tran Thanh Thu, Dewaele E, Trung LQ, Claeys M, Jacobs M and Angenon G (2007): Increasing lysine levels in pigeonpea (*Cajanus cajan* (L.) Millsp) seeds through genetic engineering. *Plant Cell, Tissue & Organ Culture* 91: pp 135-143

Nguyen TV, **Tran Thanh Thu**, Claeys M and Angenon G (2007): *Agrobacterium*-mediated transformation of sorghum (*Sorghum bicolor* (L.) Moench) using an improved in vitro regeneration system. *Plant Cell, Tissue & Organ Culture* 91: pp 155-164

Trung LQ, Van Puyvelde K, **Tran Thanh Thu**, Van NT, Triest L (2008): Genotyping of *Salix alba-S. fragilis* complex across Europe with nuclear cyp73 intron length polymorphisms. *J. Theor and App Genet* (submitted)

Tran Thanh Thu, Son LV, Binh LT and Angenon G (2008): Development of a plant-based veterinary oral vaccine to combat avian influenza in Vietnam. Abstract. BPBA symposium on "Secondary Metabolites and Molecular Farming" Gent- Belgium 7th November 2008

Son LV, **Tran Thanh Thu**, Ha CH, Angenon G, Binh LT (2008): Expression of H5N1 virus antigen M1 in Arabidopsis seeds. *J Biotechnology* 6(4A): 563-568

Tran Thanh Thu, Son LV, Binh LT, Angenon G (2009): Production of avian flu vaccine in plant seeds. Abstract. The Third International Conference on Plant-Based Vaccines & Antibodies - University of Verona, Italy - 15-17 June, 2009

Projects involved in:

1996-2001: Researcher of VUB-ICRISAT Collaborative Project on Biotechnology sub-project 1: "Development of transformation techniques for pigeonpea for enhanced nutritional quality" funded by DGIS (Directorate General International Co-operation).

1998-2002: Coordinator from Vietnam side for EC Project: " Genetics Engineering of Salt and Drought Tolerance in Rice Cultivars" DC-INCO DG XII- IC18CT980314

1998-2002: Collaborator of EU projects "Optimising Nutritional Quality of Crops" (OPTI-1 and OPTI-2).

2000-2004: Collaborator of INCO-DC project "Genetic enhancement of nutritional quality of grain sorghum" ICA4-CT-2000-30034

2001- : Collaborator of VLIR Cooperation Project with Cantho University (CTU-Vietnam).

2003-2007: Researcher for EU FP6 Grain Legumes Integrated Project (GLIP): WP5-2: Tnt1 mutagenesis group

2007- postdoc of the joint Belgian-Vietnamese project on "The development of a plant-based veterinary oral vaccine to combat avian influenza in Vietnam".

ALUMNI 2000's

Name: NAAWA SIPILANYAMBE; Year of graduation in IPMB:2000

Positions held since graduation: (dates, place&)

December 2006 to 2007 National Health Management Specialist, Zambia Accountability (Duty)

Resource person in health programmatic Medium-term Expenditure Framework planning and review of implementation at all levels of the healthcare system.

Facilitation in supportive supervision and performance assessments of the service delivery points and link individual plans to 3 Ones and provide monitoring framework for Harmonisation in Practice.

2007-2008 Senior Malaria Advisor , UNICEF , Headquarters in New York , USA

2009-2010. Chief of Health and Nutrition , UNICEF , Nigeria Country Office

January 2002 to 2006 Director, National Malaria Control Program

Accountability (Duty)

Lead Resource person in the Ministry of Health and National Roll Back Malaria Partnership on Policy issues, strategic and operational plans development for overall malaria control within integrated disease control and health sector development.

Lead focal point in resource mobilization of Global Funds to fight HIV/AIDs, Tuberculosis and Malaria, World Bank Malaria

Booster Project and Gates Foundations supported MACEPA Project. Programmatic supervision of Case Management, Vector Control, Monitoring and Evaluation, Parasitology and Operations Research Units.

Provision of technical support to ad hoc programmes for malaria control; Non Governmental Organizations; Faith Based Organizations; Private sector and Line Ministries.

January 1998 to 2002 Registrar/Head of Parasitology Unit, University Teaching Hospital

Accountability (Duty)

Coordination of ongoing hospital parasitic and AIDs opportunistic infections research projects.

Medical Officer in the National Epidemiological Task Force.

Lecturer in the School of Medicine, University of Zambia -Parasitology and Infectious

Diseases.

Major tasks:

Did you finish a PhD?: No

List of publications:

Sipilanyambe N, Simon.L.J, Chanda P, Olumese P, Snow R, Hamer D. From chloroquine to artemether-lumefantrine: the process of drug policy change in Zambia. Submitted for publication in Malaria Journal.

Dejan Zurovac, Mickey Ndhlovu, Naawa Sipilanyambe, Pascalina Chanda, Davidson H ,Hamer, Jon L Simon, Robert W Snow . Paediatric malaria case-management with artemether-lumefantrine in Zambia: a repeat cross-sectional study. Malaria Journal 2007, 6:31 (16 March 2007)

Chanda P, Masiye F, Chitah BM, Sipilanyambe N, Hawela M, Banda P, Okorosobo T. A cost-effectiveness analysis of artemether lumefantrine for treatment of uncomplicated malaria in Zambia. Malaria Journal. 2007 Feb 21; 6:21.

P, Hawela M, Kango M, Sipilanyambe Assessment of the therapeutic efficacy of a Paediatric formulation of artemether-lumefantrine (Coartem) for the treatment of uncomplicated Plasmodium falciparum in children in Zambia. Malaria Journal. 2006 Aug 28;5:75.

Depoortere E, Guthmann JP, Presse J, Sipilanyambe Nkandu E, Balkan S, de Pecoulas PE, Legros D. Efficacy and effectiveness of the combination of sulfadoxine/pyrimethamine and a 3-day course of artesunate for the treatment of uncomplicated falciparum malaria in a refugee settlement in Zambia. Trop Med Int Health. 2005 Feb; 10(2):139-45.

Financial Sustainability Plan of Malaria Public Health Interventions in Zambia. Current Practices and Future Policy Options. Ministry of Health 2005.

Depoortere E, Guthmann JP, Sipilanyambe Nkandu E, Fermon F, Balkan S, Legros D. Adherence to the combination of sulphadoxine-pyrimethamine and artesunate in the Maheba refugee settlement, Zambia. Trop Med Int Health. 2004 Jan; 9(1):62-7.

Thuma P, Mharankurwa S, Dijk J, Nguni H , Mkandawire R and Sipilanyambe N. (2005) . Roll Back Malaria Program in Zambia-Early evidence for dramatic success. MIM-PT-73454

Chisaka N, Murungasampily S, Sukwa T, Sipilanyambe N, Ali P, Moonasar P, Uusiku P, Filameno A, Mwita A, and Teveredzi V (2005). Malaria and HIV Co-infection in southern region. Status and need for stronger collaboration between programmes. MIM –JP-415360.>

Hamer DH, Ndhlovu M, Zurovac D, Fox M, Yeboah-Antwi K, Chanda P, Sipilanyambe N, Simon JL, Snow RW. Does improving coverage of parasitological diagnostic tests change malaria treatment practices? JAMA 2007; 297:2227-2231

Projects involved in:

- * Global Funds to Fight HIV/AIDs, Tuberculosis and Malaria Proposal Development and Country Coordinating Mechanisms Team. Key national malaria resource person.
 - * World Bank Malaria Booster Project. Deputy Chairperson of the Project Preparatory Team 2005.
 - * Regional MIPESA and SADC Global Funds to Fight HIV/AIDs, Tuberculosis and Malaria Proposal Development and Country Coordinating Mechanisms Team. Kampala Uganda 2003, Pretoria 2004- National Focal Point. 2006 Malaria Indicator Cluster Survey / MACEPA Project. National Principal Investigator.
 - * Socio-Economic Factors Associated With Malaria Related Illnesses And Fevers In Zambia Funded by the Poverty Monitoring and Analysis Component of the Zambia Social Investment Fund, Ministry of Finance and Planning –Principal Investigator. Study on the factors contributing the evolution of resistance to Sulphadoxine- Pyrimethamine and Chloroquine in the treatment of Malaria (East Africa Network for Monitoring Anti-malarial Treatment (EANMAT) and Prince Leopold Institute of Tropical Medicine). Co-Investigator
 - * WHO /TDR Regional Bio informatics Network for Africa; Zambia Focal point WHO/Novartis Pregnancy Registry in Zambia Evaluating the Safety Profile of Coartem® and SP in Pregnant Women with Symptomatic Malaria-Protocol Number: CCOA566A2407 – Principal Investigator.
- Applied Research for Childhood Health /Zambia Boston University Malaria Project. USAID supported. National Principal Investigator.

Malaria versus Maternal and Child Health: Impact of HIV/Malaria co-infections and immunity. WHOMIM//TDR.

Name: Claudina A. Pérez Novo; Year of graduation in IPMB: 2000

Positions held since graduation: (dates, place&)

2000-2001: Pre- doctoral training in the Department of Otorhinolaryngology, Ghent University Hospital, Belgium.

2001-2003: Doctoral training in the Department of Otorhinolaryngology. Grant from the Faculty of Medicine, Ghent University Hospital, Belgium.

2003-2006: Doctoral in the Department of Otorhinolaryngology, Ghent University Hospital, Belgium (BOF Grant from the University of Ghent).

2008- 2012: Post- Doc researcher at the Department of Otorhinolaryngology, Ghent University, Belgium (FWO mandate)

Major tasks:

Post-doc researcher

Did you finish a PhD ?:

Yes, 26 February 2006

List of publications:

A1

1. Pérez C, Vandesompele J, Vandembroucke I, Holtappels G, Speleman F, Gevaert P, Van Cauwenberge P, Bachert C. Quantitative Real Time Polymerase Chain Reaction for measurement of human Interleukin - 5 receptor alpha spliced isoforms mRNA. *BMC Biotechnology* 2003; 3:17- 26.
2. Gevaert P, Bachert C, Holtappels G, Novo CP, Van der Heyden J, Franssen L, Depraetere S, Walter H, van Cauwenberge P, Tavernier J. Enhanced soluble interleukin-5 receptor alpha expression in nasal polyposis. *Allergy* 2003; 58: 371- 379.
3. Watelet JB, Claeys C, Pérez-Novo C, Gevaert P, Van Cauwenberge P, Bachert C. Transforming growth factor beta1 in nasal remodeling: differences between chronic rhinosinusitis and nasal polyposis. *American Journal of Rhinology* 2004; 18: 267- 72.
4. Pérez-Novo CA, Kowalski ML, Kuna P, Ptasinska A, Holtappels G, van Cauwenberge P, Gevaert P, Johannson S, Bachert C. Aspirin sensitivity and IgE antibodies to *Staphylococcus aureus* enterotoxins in nasal polyposis: studies on the relationship. *International Archives of Allergy and Immunology* 2004; 133: 255- 60.
5. Pérez- Novo CA, Claeys C, Speleman F, Van Cauwenberge P, Bachert C, Vandesompele J. Impact of RNA quality on reference gene expression stability. *Biotechniques* 2005; 39: 52- 56.
6. Pérez- Novo CA, Watelet JB, Claeys C, Van Cauwenberge P, Bachert C. Prostaglandin, Leukotriene and Lipoxin balance in Chronic Rhinosinusitis with and without Nasal Polyposis. *Journal of Allergy and Clinical Immunology* 2005; 115: 1189- 1196.
7. Zhang N, Gevaert P, Van Zele T, Pérez- Novo C, Patou J, Holtappels G, Van Cauwenberge P, Bachert C. An update on the impact of *staphylococcus aureus* enterotoxins in chronic rhinosinusitis with nasal polyposis. *Rhinology* 2005; 43: 162- 168.
8. Pérez- Novo CA, Claeys C, Van Zele T, Van Cauwenberge P, Bachert C. Eicosanoid metabolism and eosinophilic inflammation in nasal polyp patients with immune response to *Staphylococcus aureus* enterotoxins. *American Journal of Rhinology* 2005; 4: 456-60.
9. Pérez-Novo CA, Claeys C, Van Cauwenberge P, Bachert C. Expression of eicosanoid receptors subtypes and eosinophilic inflammation: implication on chronic rhinosinusitis. *Respiratory Research*. 2006; 7: 75-80.
10. Bachert C, Gevaert P, Zhang N, van Zele T, Pérez-Novo C. Staphylococcal superantigens in airway disease: A review. Part 1: The role of *S-aureus* enterotoxins in allergic rhinitis and nasal polyps. *Allergologie* 2007; 30: 129-138.

11. Bachert C, Zhang N, Gevaert P, Van Zele T, Pérez-Novo C. Role of staphylococcal superantigens in airway disease: A review. Part 2: S-aureus enterotoxins in AERD, asthma, early childhood wheezing and COPD. *Allergologie* 2007; 30: 155-164.
12. Pérez-Novo CA, Waeytens A, Claeys C, Van Cauwenberge P, Bachert C. Staphylococcus aureus Enterotoxin B Regulates Prostaglandin E2 Synthesis, Growth and Migration in Nasal Tissue Fibroblasts. *Journal of Infectious Diseases* 2008; 197: 1036-1043.
13. Ferdinande L, Demetter P, Pérez-Novo C, Waeytens A, Taildeman J, Rottiers I, Rottiers P, De Vos M, Cuvelier CA. Inflamed intestinal mucosa features a specific epithelial expression pattern of indoleamine 2,3-dioxygenase. *Int J Immunopathol Pharmacol.* 2008; 21:289-95.
14. Van Bruaene N, Pérez-Novo CA, Basinski TM, Van Zele T, Holtappels G, De Ruyck N, Schmidt-Weber C, Akdis C, Van Cauwenberge P, Bachert C, Gevaert P. T-cell regulation in chronic paranasal sinus disease. *J Allergy Clin Immunol.* 2008; 121:1435-41.
15. Zhang N, Van Zele T, Pérez-Novo C, Van Bruaene N, Holtappels G, Deruyck N, Van Cauwenberge P, Bachert C. Different types of T-effector cells orchestrate mucosal inflammation in chronic sinus disease. *J Allergy Clin Immunol.* 2008; 122:961-8
16. Van Bruaene N, Derycke L, Pérez-Novo CA, Gevaert P, Holtappels G, De Ruyck N, Cuvelier C, Van Cauwenberge P, Bachert C. TGF-beta signaling and collagen deposition in chronic rhinosinusitis. *J Allergy Clin Immunol.* 2009; 124 : 253-9.
17. Patou J, Holtappels G, Affleck K, Gevaert P, Pérez-Novo C, Van Cauwenberge P, Bachert C. Enhanced release of IgE-dependent early phase mediators from nasal polyp tissue. *J Inflamm (Lond).* 2009; 6:11.
18. Pérez-Novo CA, Holtappels G, Vinall SL, Xue L, Zhang N, Bachert C, Pettipher R. CRTH₂ mediates the activation of human Th2 cells in response to PGD₍₂₎ released from IgE/anti-IgE treated nasal polyp tissue. *Allergy.* 2009 Oct 12.
19. Taildeman J, Demetter P, Rottiers I, Holtappels G, Bachert C, Cuvelier CA, Pérez-Novo CA. Identification of the nasal mucosa as a new target for leptin action. *Journal of Histopathology*, in press.

Book's chapters

1. Bachert C, Gevaert P, Zhang N, Van Zele T, Pérez-Novo C: Role of Staphylococcal Superantigens in Airway Disease. *Chem Immunol Allergy.* 2007;93:214-36. In: G. Marone (ed): *Superantigens and Superallergens*, Karger, Basel 2007.
2. Peter T, Van Zele T, Gevaert P, Zhang N, Pérez-Novo C, Van Bruaene N, Patou J, Bachert C. Staphylococcus aureus-derived superantigens in nasal polyp disease. In *Nasal polyposis 2010*, (Ed): Önerci Metin and Ferguson Berrylin, Springer, Heidelberg.

Projects involved in:

Role of eicosanoids in T-cell and dendritic cell activation in chronic rhinosinusitis/nasal polyp and aspirin exacerbated respiratory disease

Epigenetics events regulating the inflammatory process of chronic airway diseases

Name: Fikru Belema Bedada; Year of graduation in IPMB: 2001

Positions held since graduation:

PhD study 2002- Nov 1, 2006 at Martin Luther University at Halle (Saale), Germany

Postdoctoral Fellow from **(11/2006-5/2007)** at Max Planck Institute (MPI) for
heart and lung Research, Bad Nauheim, Germany

Postdoctoral Fellow from **(6/2007-7/2008)** at University of Michigan, Ann Arbor,
Michigan

Postdoctoral Fellow from **(8/2008 to present)** at University of Minnesota,
Minneapolis, Minnesota

Major tasks: **Post doctoral fellow**

Did you finish a PhD?: **Yes**

Projects involved in:

Stem cell therapy in hear failure Gene Therapy in cardiac hypertrophy and heart failure

List of publications:

1. Schulze, M., **Belema-Bedada, F.**, Technau, A., and Braun, T. (2005).
Mesenchymal stem cells are recruited to striated muscle by NFAT/IL-4-
mediated cell fusion. *Genes Dev* 19, 1787-1798.
2. **Belema Bedada, F.**, Technau, A., Ebelt, H., Schulze, M., and Braun, T.
(2005). Activation of myogenic differentiation pathways in adult bone
marrow-derived stem cells. *Mol Cell Biol* 25, 9509-9519.
3. **Belema Bedada, F.**, Gunther, S., Kubin, T., and Braun, T. (2006).
Differentiation versus Plasticity: Fixing the Fate of Undetermined Adult
Stem Cells. *Cell Cycle* 5
4. **Belema Bedada, F.**, and Braun, T. (2007). Partial Induction of the
Myogenic Program in Noncommitted Adult Stem Cells. *Cells Tissues and
Organs*
5. **Belema-Bedada, F.**, Uchida, S, Martiree, A, Kostin, S, and Braun, T.
(2008). Efficient homing of multipotent adult mesenchymal stem cells

depends on FROUNT-mediated clustering of CCR2. **Cell Stem Cell**

6. Turner, I., **Belema-Bedada, F.**, Martindale, J., Townsend, D., Wang, W., Palpant, N., Yasuda, S., Barnabei, M., Fomicheva, E., Metzger, J. (2008) Gene, Cell and Chemical-Based Experimental Therapeutics for the Failing Heart. *Journal of Cardiovascular Translational Research*
7. Nathan J. Palpant, Michael L. Szatkowski, Wang Wang, DeWayne Townsend, **Fikru B. Bedada**, Lauren G. Koch, Steven L. Britton, Joseph M. Metzger. (2009). Artificial Selection for Whole Animal Low Intrinsic Aerobic Capacity Co-Segregates with Hypoxia-Induced Cardiac Pump Failure. *Journal of PLoS ONE*
8. **Belema-Bedada, F.**, Arden, E., Metzger, J. (2010) MiR-208a regulates Phenylephrine-induced hypertrophy via GATA4 and calcineurin in adult cardiac myocytes. Manuscript in preparation
9. **Belema-Bedada, F.**, Ursula J., and Braun, T. (2010). Adult bone marrow derived multipotent stem cells rescues lethally irradiated mice. Manuscript in preparation

Name: Toya Nath Baral; Year of graduation in IPMB: 2001

Positions held since graduation:

2001-2006, PhD student in VUB

2006-2007, Postdoc Fellow, in National Research Council of Canada, Ottawa

2007-date, Research Officer, in National Research Council of Canada, Ottawa

Major tasks:

Conducting somewhat independent research of antibody engineering for their application in cancer as well as infectious diseases.

Did you finish a PhD?: Yes, I did

List of publications:

1. Toya Nath Baral, Immuno-biology of African trypanosomes, need of alternative interventions. *Journal of Biomedicine and Biotechnology* 2010; 2010:389153. Epub 2010 Feb 23.

2. Andrea Bell, Zheng J. Wang, Mehdi Arbabi, Anthony T. Chang, Yves Durocher, Ulrike Trojahn, Jason Baardsnes, Maria L. Jaramillo, Shenghua Li, Toya Nath Baral, Maureen

- O'Connor-McCourt, Roger MacKenzie and Jianbing Zhang. Differential tumor-targeting abilities of three single-domain antibody formats. *Cancer Letter*, 2009.
3. Serge Muyldermans, Toya Nath Baral, V. Cortez Retamozzo, P. De Baetselier, E. De Genst, J. Kinne, H. Leonhardt, S. Magez, V.K. Nguyen, H. Revets, U. Rothbauer, B. Stijlemans, S. Tillib, U. Wernery, L. Wyns, Gh. Hassanzadeh-Ghassabeh and Dirk Saerens. Camelid immunoglobulins and nanobody technology. *Veterinary Immunology and Immunopathology*. 2009, 128: 178-183
 4. Md Badruz Zaman, Toya Nath Baral, Dennis Whitefield, Jianbing Zhang and Kui Yu. Single Domain Antibody Functionalized CdSe/ZnS Quantum Dots for Cellular Imaging of Cancer Cells. *Journal of Physical Chemistry* 2009, 113(2):496-499
 5. Jianbing Zhang, Xin Lui, Andrea Bell, Rebecca To, Toya Nath Baral, Ali Azizi, Jianjun Li, Brian Cass and Yves Durocher. Construction and characterization of chimeric heavy chain antibodies (Submitted to *Protein Engineering, Design, and Selection* 2009, May 65(1):77-82
 6. Dirk Saerens, Benoît Stijlemans, Toya Nath Baral, Nguyen Thi Giang Thanh, Kinne Joerg, Patrick De Baetselier, Stefan Magez, Serge Muyldermans and Katja Conrath. Parallel selection of multiple anti-infectom Nanobodies without access to purified antigens. *Journal of Immunological Methods* 2008 Jan 1; 329(1-2):138-50.
 7. Stefan Magez, Magdalena Radwanska, Michael Drenan, Lizette Fick, Toya Nath Baral, Nasiema Allie, Muazzam Jacobs, Sergei Nedospasov, Frank Brombacher Bernard Ryffel, and Patrick De Baetselier. TNFp55 signal transduction and macrophage derived soluble TNF are crucial for nitric oxide mediated T. congolense parasite killing. *Journal of Infectious Diseases* 2007, Sep 15;196(6):954-62.
 8. Benoît Stijlemans, Toya Nath Baral, Martin Guilleims, Lea Brys, Johanna Korf, Michael Drennan, Jan Van Den Abbeele, Patrick De Baetselier and Stefan Magez. A Glysylphosphatidylinositol-Based treatment alleviates trypanosomiasis-associated immunopathology. *Journal of Immunology*. 2007. 179: 4003-4014 / No. 6 / Sep 15, 2007
 9. Toya Nath Baral, Frank Brombacher, Patrick De Baetselier and Stefan Magez. Control of *Trypanosoma evansi* infection is IgM mediated and does not require a classical type I inflammatory response. *Journal of Infectious Diseases*. 2007 May 15;195(10):1513-20
 10. Toya Nath Baral, Stefan Magez, Benoît Stijlemans, Katja Conrath, Benoit vanhollebeke, Etienne Pays, Serge Muyldermans and Patrick De Baetselier. Experimental therapy of African trypanosomiasis with a nanobody-conjugated human trypanolytic factor. *Medicine Science (Paris)*. 2006 Nov;22(11):914-6. French
 11. Toya Nath Baral, Stefan Magez, Benoît Stijlemans, Katja Conrath, Benoit vanhollebeke, Etienne Pays, Serge Muyldermans and Patrick De Baetselier. Experimental therapy of African trypanosomiasis with a nanobody-conjugated human trypanolytic factor. *Nature Medicine*. 2006 May;12(5):580-4.
 12. Stefan Magez, Magdalena Radwanska, Michael Drenan, Lizette Fick, Toya Nath Baral, Frank Brombacher and Patrick De Baetselier. INFg and NO in combination with antibodies are key protective host immune factors during T. congolense TC13 infections. *Journal of Infectious Diseases*. 2006, 1;193(11):1575-1583
 13. Stefan Magez, Benoît Stijlemans, Toya Nath Baral, Patrick De Baetselier. VSG-GPI

anchors of African trypanosomes: their role in macrophage activation and induction of infection-associated immunopathology. *Microbes Infect.* 2002, 4:999-1006

Manuscripts submitted/ in preparation:

1. Toya Nath Baral, Than Dung Nguyen, Yanal Murad, and Jianbing Zhang. Isolation of functional single domain antibody by whole cell immunization: application in cancer. (Manuscript in preparation)
2. Toya Nath Baral, Henk van Faassen, and Jianbing Zhang. Prediction of protein expression level by SPR. (Manuscript in preparation)

Name: Mulu Z. Tesfay; Year of graduation in IPMB: 2001

Positions held since graduation: (dates, place)

Graduate student (2001/2-2004 Northern Illinois University, Dekalb, Illinois, USA, 2005-2009 LSU Health Sciences Center, Shreveport, Louisiana, USA), Postdoctoral Scientist (Since Dec 2009, Mayo Clinic, Rochester, Minnesota, USA)

Major tasks: Research

Did you finish a PhD?: yes

List of publications:

1. Mulu Z. Tesfay, Jun Yin, Christina L. Gardner, Mikhail V. Khoretonenko, Nadejda L. Korneeva, Robert E. Rhoads, Kate D. Ryman and William B. Klimstra, (2008). Interferon alpha/beta priming inhibits cap dependent translation of viral but not cellular mRNA by a PKR-independent mechanism. *J. Virol.*
2. Christina L. Gardner, Crystal W. Burke, Mulu Z. Tesfay, Pamela J. Glass, William B. Klimstra and Kate D. Ryman. (2008). Eastern and Venezuelan Equine Encephalitis Viruses differ in their infectivity for Dendritic Cells and Macrophages: The impact of altered cell tropism on pathogenesis. *J Virol.* 82:10634-46.
3. B. Dombrecht, M. Z. Tesfay, C. Verreth¹, C. Heusdens¹, M. C. Nápoles, J. Vanderleyden and J. Michiels. (2002). The *Rhizobium etli* gene *iscN* is highly expressed in bacteroids and required for nitrogen fixation. *Mol Gen Genomics*, 267: 820-828.
4. Mulu Z. Tesfay, Christina L. Gardner, Kate D. Ryman and William B. Klimstra. Inhibition of Sindbis virus minus-strand RNA synthesis by IFN-induced PKR-independent manner. Manuscript in preparation.
5. Khoretonenko, M.V., M.Z. Tesfay, K.A. Tsetsarkin, D.L. Vanlandingham, W.B. Klimstra,

S. Higgs and K.D. Ryman. Early and late translation of the yellow fever virus RNA genome is strongly inhibited by interferon priming via PKR-dependent and -independent mechanisms. Manuscript in preparation.

Abstract /presentations

1. Mulu Z. Tesfay. (2007). A new mechanism of interferon-induced antiviral activity that inhibits translation of mRNA produced in the cytoplasm, paper presented at 4th Annual Virology Colloquium (LSUHSC-S)
2. M. Tesfay, J. Yin, N. Korneeva, R.E. Rhoads, K. D. Ryman and W.B. Klimstra. (2007). A new mechanism of interferon-induced antiviral activity that inhibits translation of RNA introduced into the cytoplasm, Presented at Annual Meeting of the American society for virology annual meeting, Corvallis, OR.
3. M. Tesfay, J. Yin, N. Korneeva, R.E. Rhoads, K. D. Ryman and W.B. Klimstra. (2007). A new mechanism of interferon-induced antiviral activity that inhibits translation of RNA introduced into the cytoplasm, Presented at Annual LSUHSC-S Graduate Research Day, Shreveport, LA.
4. W. B. Klimstra, M. Tesfay, J. Yin, N. Korneeva, R.E. Rhoads, and K. D. Ryman. (2007). A new mechanism of interferon-induced antiviral activity that inhibits translation of mRNA introduced into the cytoplasm, Paper presented at Annual Meeting of the International Society for Interferon and Cytokine Research, Oxford, U.K.
5. W. B. Klimstra, M. Tesfay, J. Yin, N. Korneeva, R.E. Rhoads, K. D. Ryman. (2007). A new mechanism of interferon-induced antiviral activity that inhibits translation of mRNA introduced into the cytoplasm, Paper presented at 8th International Symposium on Positive-Strand RNA Viruses, Washington, D.C.
6. M. V. Khoretonenko, M. Z. Tesfay, K. A. Tsetsarkin, S. L. Ragsdale, D. L. Vanlandingham, S. Higgs, W. B. Klimstra, and K. D. Ryman. (2007). Early and late translation of yellow fever virus 17D vaccine strain genome is strongly inhibited by type I IFN via PKR-dependent and independent mechanism Presented at Annual Meeting of the American society for virology annual meeting, Corvallis, OR.
7. Contribution of the Brome Mosaic Virus RNA3 3'Terminal Untranslated Region to Homologous Intra-segmental RNA Recombination, paper presented at annual meeting of American society for virology annual meeting, 11-16 July, 2003, University of California, Davis.
8. B. Dombrecht, M. Z. Tesfay, C. Verreth¹, C. Heusdens¹, M. C. Nápoles, J. Vanderleyden and J. Michiels. (2002). *Rhizobium etli* nifR is highly expressed in bacteroids and essential

for nitrogen fixation Presented at First International Conference on Legume Genomics and Genetics: Translation to Crop Improvement, Minneapolis-St. Paul, MN Projects involved in: Alphavirus RNA-RNA Homologous recombination, Pathogenesis of Alphaviruses, Host-virus interaction studies, Oncolytic virus targeting to tumor cells.

Name: Bernard S Marasa; Year of graduation in IPMB: 2001

Positions held since graduation: (dates, place&)

6/2007-0/0000

Visiting Postdoctoral Fellow National Institute of Aging-NIH, USA

Major Duties & Responsibilities

My key role was to initiate an independent line of inquiry on the potential functional consequences of interplay between miRNA and RNA Binding Proteins (RBPs) in various pathologies associated with aging and senescence. In addition, my position required analysing the whole human miRNome expression profile between young and senescent human fibroblasts, and under various stress condition. I am also responsible for maintaining the laboratory components of miRNA research in the group and some of my routine duties and responsibilities include; Perform routinely tasks involving cloning, sequencing, site-directed mutagenesis and confirmatory assays using either EGFP or dual luciferase reporter assays

Develop, and perform qRT- PCR assays for various miRNAs and genes of interest and trouble shoot in case of problems.

Perform miRNA and gene microarrays as may be needed Maintain and update regularly the real time PCR systems of the group (HT7900 and AB-7300 machines) Manage the human tissue biopsies of new and archived age matched PBMCs from young and old donors from the Baltimore Longitudinal Study on Aging (BLSA) and biopsies from tissue matched human normal and tumour biopsies.

Provide technical support and guidance in methods used by the RNA Regulation Section (RRS) research group

Drafting progress reports and prepare manuscripts for publication in peer reviewed journals. Help in supervision of summer students, post-bacs and PhD students in the lab and lead journal club for the group

8/2003-6/2007 Graduate Research Assistant University of Maryland, Baltimore

Major Duties & Responsibilities

Conducted independent research for my PhD project examining the physiological roles of the novel mammalian transient receptor potential channels (TRPCs) in normal intestinal epithelial cells. Involved in the generation and characterization of TRPC1 & TRPC5 channels in IEC-6 cells. My main duties and responsibilities included; 1. Perform real-time PCR on TRPC1 genes and downstream signaling partners 2. Cloning, sequencing and site directed mutagenesis on constructs 3. Perform real-time Ca²⁺ imaging on stable transfected cells

4. Analyse the downstream signal transduction pathways mediated by TRPC channels 5. Served as teaching assistant for several graduate courses including Human Pathology (PATH 601), Systemic Pathology (PATH 602) and Molecular Mechanisms of Signal Transduction (MPHY 616)

10/2001-8/2003 Research Assistant University of Maryland, Baltimore

Major Duties & Responsibilities

Department of Surgery, University of Maryland School of Medicine, Baltimore, MD

·Conducted independent research leading to characterization of the roles of substance P in store operated calcium entry and intestinal epithelial cell restitution

8/1999-9/2001 Graduate Research Fellow Vlaamse Institute of Biotechnology and Vrije Universiteit Brussels

Major Duties & Responsibilities

Conducted independent research for my

Masters thesis involving generation & characterization of unique phage derived camel antibodies (cAbs) against chicken lysozyme & human TNF- α under the mentorship of Prof. Sergei Muyldermans. I was involved routinely in 1. Isolation of PBMCs from blood of immunized camels 2. Cloning, sequencing and site-directed mutagenesis of the camellid VHH library the generation of phage display library of the binders against human TNF- α and chicken lysozyme antigens. 3. Used bio-panning (ELISA) to select the high affinity binders and the IAsys system for analyzing the binding affinity of isolated binders.

Did you finish a PhD?: Yes, 2007.

List of publications:

PUBLICATIONS

Original Research Articles

1. Marasa B.S, Srikantan S, Masuda K, Abdelmohsen K, Kuwano Y, Yang X, Martindale J,

- Rinker-Schaeffer C, and Gorospe M. MKK4 Increase during senescence linked to the lowering of multiple microRNAs. *Sci Signal*. 2009 Oct 27;2(94):ra69
2. Kuwano, Yuki; Pullmann, Rudolf; Marasa, Bernard; Abdelmohsen, Kotb; Lee, Eun Kyung; Yang, Xiaoling; Martindale, Jennifer; Zhan, Ming; Gorospe, Myriam. NF90 selectively represses the translation of target mRNAs bearing an AU-rich signature motif. *NAR* 2009 Oct, 2009 (Accepted)
3. Kiyoshi Masuda, Bernard Marasa, Jennifer L. Martindale, Marc K. Halushka, and Myriam Gorospe. Tissue- and age-dependent expression of RNA-binding proteins that influence mRNA turnover and translation Priority Research Paper - *AGING* August, 2009 Vol.1 No.8 pp.681-698
4. Shant J, Cheng K, Marasa BS, Wang JY and Raufman JP. Akt dependent NF-kappa B activation is required for bile acids to rescue colon cancer cells from stress-induced apoptosis. *Exp Cell Res*. 2009 Feb 1; 315 (3): 432-50. Epub 2008 Nov 20.
5. Greenspon J, Li R, Xiao L, Rao JN, Marasa BS, Strauch ED, Wang JY and Turner DJ. Sphingosine-1-Phosphate protects intestinal epithelial cells from apoptosis through the Akt signaling pathway. *Dig Dis Sci*. 2009 Mar;54(3):499-510. Epub 2008 Jul 25.
6. Marasa BS, Xiao L, Rao JN, Zou T, Liu L, Wang J, Bellavance E, Turner DJ, and Wang JY. Induced TRPC1 expression increases protein phosphatase 2A sensitizing intestinal epithelial cells to apoptosis through inhibition of NF- κ B activation. *Am J Physiol Cell Physiol*. 2008 March 5; 294 C1277-1287. Epub 2008 March 05.
7. Zou T, Liu L, Rao JN, Marasa BS, Chen J, Xiao L, Zhou H, Gorospe M, and Wang JY. Polyamines modulate the subcellular localization of RNA-binding protein HUR through AMP-activated protein kinase-regulated phosphorylation and acetylation of importin alpha 1. *Biochem J*. 2008 Jan 15;409(2):389-98.
8. Xiao L, Rao JN, Zou T, Liu L, Marasa BS, Chen J, Turner DJ, Zhou H, Gorospe M, Wang JY. Polyamines regulate the stability of activating transcription factor-2 mRNA through RNA-binding protein HuR in intestinal epithelial cells. *Mol Biol Cell*. 2007 Nov;18(11):4579-90. Epub 2007 Sep
9. Chen J, Rao JN, Zou T, Liu L, Marasa BS, Xiao L, Zeng X, Turner DJ, Wang JY. Polyamines are required for expression of Toll-like receptor 2 modulating intestinal epithelial barrier integrity. *Am J Physiol Gastrointest Liver Physiol*. 2007 Sep;293(3):G568-76. Epub 2007 Jun 28
10. Zhang AH, Rao JN, Zou T, Liu L, Marasa BS, Xiao L, Chen J, Turner DJ, Wang JY. p53-dependent NDRG1 expression induces inhibition of intestinal epithelial cell proliferation but not apoptosis after polyamine depletion. *Am J Physiol Cell Physiol*. 2007 Jul;293(1):C379-89. Epub 2007 Apr 18.
11. Xiao L, Rao JN, Zou T, Liu L, Marasa BS, Chen J, Turner DJ, Passaniti A, Wang JY. Induced JunD in intestinal epithelial cells represses CDK4 transcription through its proximal promoter region following polyamine depletion. *Biochem. J*. 2007 Jan 25 [Epub ahead of print]
12. Rao JN, Liu L, Zou T, Marasa BS, Boneva D, Wang SR, Malone DL, Turner DJ, Wang JY. Polyamines are required for phospholipase-C (gamma) 1 expression promoting intestinal

- epithelial cell restitution after wounding. *Am J Physiol Gastrointest Liver Physiol*. 2006 Sep 14; [Epub ahead of print]
13. Lan Liu, Xin Guo, Jaladanki N. Rao, Tong tong Zou, Bernard S. Marasa, Jie Chen, Jose Greenspon, Robert A. Casero Jr, and Jian-Ying Wang. Polyamine modulated c-Myc regulates p21 transcription through proximal region of its promoter in normal intestinal epithelial cells. *Biochem J*. 2006 Sep 1;398(2):257-67.
 14. Tongtong Zou, Krystyna Mazan-Mamczarz, Jaladanki N. Rao, Lan Liu, Bernard S. Marasa, Ai-Hong Zhang, Lan Xiao, Myriam Gorospe and Jian-Ying Wang. Polyamine depletion increases cytoplasmic levels of RNA-binding protein HUR leading to stabilization of nucleophosmin and p53 mRNAs. *J Biol Chem* 2006 Jul 14; 281(28):19387-94. Epub 2006 May 10.
 15. Marasa BS, Rao JN, Zou T, Liu L, Keledjian KM, Zhang A-I, Xiao L, Chen Jie, Turner DJ, and Wang JY . Induced TRPC1 expression sensitizes intestinal epithelial cells to apoptosis by inhibiting NF- κ B activation through Ca²⁺ influx. *Biochem J*. 2006 Jul 1; 397(1):77-87.
 16. Zhang HM, Keledjian KM, Rao JN, Zou T, Liu L, Marasa BS, Wang SR, Ru L, Strauch ED, Wang JY. Induced focal adhesion kinase expression suppresses apoptosis by activating NF- κ B signaling in intestinal epithelial cells. *Am J Physiol Cell Physiol*. 2006 May; 290(5):C1310-20. Epub 2005 Dec 14.
 17. Liu L, Li L, Rao JN, Zou T, Zhang HM, Boneva D, Bernard MS, Wang JY Polyamine-modulated expression of c-myc plays a critical role in stimulation of normal intestinal epithelial cell proliferation. *Am J Physiol Cell Physiol*. 2005 Jan; 288(1):C89-99. Epub 2004 Sep 8.
 18. Rao JN, Platoshyn O, Golovina VA, Liu L, Zou T, Marasa BS, Turner DJ, X-J Yuan J, Wang JY. TRPC1 functions as a store-operated Ca²⁺ channel in intestinal epithelial cells and regulates early mucosal restitution after wounding. *Am J Physiol Gastrointest Liver Physiol*. 2006 Apr; 290(4):G782-92 Epub 2005 Nov 10.
 19. Zou T, Rao JN, Liu L, Marasa BS, Keledjian KM, Zhang AH, Xiao L, Bass BL, Wang JY. Polyamine depletion induces nucleophosmin modulating stability and transcriptional activity of p53 in intestinal epithelial cells. *Am J Physiol Cell Physiol*. 2005 Sep;289(3):C686-96. Epub 2005 May 4.
 20. GuoX, Rao JN, Liu L, Zou T, Keledjian KM, Boneva D, Marasa BS, Wang JY. Polyamines are necessary for synthesis and stability of occludin protein in intestinal epithelial cells. *Am J Physiol Gastrointest Liver Physiol* 2005 Jun; 288(6):G1159-69. Epub 2005 Feb 3.
 21. Ballingall, KT; Marasa,SB; Luyai, A; McKeever, DJ. Identification of diverse BoLA DQA3 genes consistent with non-allelic sequences. *Anim Genet* 1998 Apr; 29(2):123-9.

Projects involved in:

My current projects involve investigations on the potential functional consequences of interplay between miRNA and RNA Binding Proteins (RBPs) in various pathologies associated with aging and senescence. In addition, my position requires analysing the whole human miRNome expression profile between young and senescent human fibroblasts, and

under various stress conditions to identify potential aging signaling networks controlled by miRNAs

Name: Abel Acosta Sanchez; Year of graduation in IPMB: 2002

Positions held since graduation: (dates, place&):

from June 2003 till today...: Research Assistant at VIB3-KULeuven; Department TRANSGENE TECHNOLOGY & GENE THERAPY.

Major tasks: To support all research project running in our Lab regarding Molecular Biology Techniques

Did you finish a PhD ?: Not

List of publications:

Molecular evolution of a novel hyperactive Sleeping Beauty transposase enables robust stable gene transfer in vertebrates. Mátés L, Chuah MK, Belay E, Jerchow B, Manoj N, Acosta-Sanchez A, Grzela DP, Schmitt A, Becker K, Matrai J, Ma L, Samara-Kuko E, Gysemans C, Pryputniewicz D, Miskey C, Fletcher B, Vandendriessche T, Ivics Z, Izsvák Z. Nat Genet. 2009 Jun;41(6):753-61. Epub 2009 May 3. PMID: 19412179 [PubMed - in process]

Related articles

2. IL-10 dampens TNF/inducible nitric oxide synthase-producing dendritic cell-mediated pathogenicity during parasitic infection. Guilliams M, Movahedi K, Bosschaerts T, Vandendriessche T, Chuah MK, Hérin M, Acosta-Sanchez A, Ma L, Moser M, Van Ginderachter JA, Brys L, De Baetselier P, Beschin A. J Immunol. 2009 Jan 15;182(2):1107-18. PMID: 19124754 [PubMed - indexed for MEDLINE]

Related articlesFree article

3. Efficacy and safety of adeno-associated viral vectors based on serotype 8 and 9 vs. lentiviral vectors for hemophilia B gene therapy. Vandendriessche T, Thorrez L, Acosta-Sanchez A, Petrus I, Wang L, Ma L, DE Waele L, Iwasaki Y, Gillijns V, Wilson JM, Collen D, Chuah MK. J Thromb Haemost. 2007 Jan;5(1):16-24. Epub 2006 Sep 26. PMID: 17002653 [PubMed - indexed for MEDLINE]

Related articles

Projects involved in: Please to ask Prof. Thierry Vandendriessche and Prof. Marinee Chuah, they have more details concerning the projects.

Name: MFOPOU KUNJOM Josué ; Year of graduation in IPMB: 2002

Positions held since graduation: (dates, place&):

Oct 2002 - Sept 2009: Cell Differentiation Lab, VUB-GF, PhD fellow;

Oct 2009 till now: Cell Differentiation Lab, VUB-GF, Post doctoral fellow

Major tasks: Laboratory research, training of MSc students

Did you finish a PhD?: Yes

List of publications:

Mbanya J.C., Mfopou J.K., Sobngwi E., Mbanya D.N., Ngogang J.Y. Metabolic and hormonal effects of five common African diets eaten as mixed meals: the Cameroon study. *Eur J Clin Nutr.* 2003; 57(4): 580-585.

Baeyens L., De Breuck S., Lardon J., Mfopou J.K., Rooman I., Bouwens L. In vitro generation of insulin-producing beta cells from adult exocrine pancreatic cells. *Diabetologia.* 2005; 48(1):49-57.

Mfopou J.K., Willems E., Lyens L., Bouwens L. Expression of regulatory genes for pancreas development during murine embryonic stem cell differentiation. *Int J Dev Biol.* 2005; 49(8): 915-922.

Mfopou J.K., De Groote V., Xu X., Heimberg H., Bouwens L. Sonic hedgehog and other soluble factors from differentiating embryoid bodies inhibit pancreas development. *Stem Cells* 2007; 25(5): 1156-1165.

Mfopou J.K., Bouwens L. Milestones of pancreatic differentiation from embryonic stem cells. *Adv Gene Mol Cell Ther.* 2007; 1(2): 161-171.

Mfopou J.K., Bouwens L. Hedgehog signals in pancreatic differentiation from embryonic stem cells: revisiting the neglected. *Differentiation* 2008; 76: 107-117

Mfopou J.K., Chen B., Mateizel I., Sermon K., Bouwens L. Early BMP blockade and late exposure to FGF exclude hepatic and improve pancreatic fate from human embryonic stem cells. *Gastroenterology* 2010, in press

Mfopou J.K., Bouwens L. Hedgehog signaling: the first barrier to differentiation of pancreatic cells from ES cells? 41st annual meeting of the European Association for the Study of Diabetes (EASD), Athens, Greece. September 10-15, 2005 *Diabetologia* 2005; 49 Suppl 1; A13-A14.

Projects involved in:

Differentiation of human embryonic stem cells into pancreatic cells for the treatment of diabetes

Name: Hector Xavier Zambrano Manrique; Year of graduation in IPMB: 2002

Positions held since graduation: (dates, place&)

2006 Evaluator. Cereps Projects. Ecuadorian Secretary for Science and Technology. Quito, Ecuador

2007-2008 Assistant. Department of Education and Research. Luis Vernaza Hospital. Junta de Beneficencia de Guayaquil. Guayaquil, Ecuador.

2008-Present Postdoctoral Fellow, Department of Dermatology, School of Medicine, Yale University

Major tasks:

Did you finish a PhD?: NO

List of publications:

Feng Q, Cherne S, Winer R, Zambrano H, Yerovi C, Hawes S, Koutsky L, Kiviat N. Evaluation of dry and wet transported cervical exfoliated samples for detection of human papillomavirus infection. (In press).

Zambrano H, Areán-Cuns C, Vigliotti V, Lee SH, Zambrano E. Identification of Human Papillomavirus (HPV) Genotypes In Pediatric Laryngeal Papillomatosis (PLP). Accepted for Platform Presentation at the 2010 Society for Pediatric Pathology Meeting, Washington DC, March 2010

Zambrano H, Feng Q, Velez A, Cherne S, Dillon A, Fernández T, Yerovi C. Detection and typification of Human Papilloma Virus (HPV) in a Group of Patients with Cytologic Abnormalities. (In Press)

Zambrano H, Feng Q, Velez A, Cherne S, Kenney D, Fuentes H, Yerovi C. Detection of Human Papilloma Virus in Ecuadorian Patients with Cytologic Alterations Using a PCR-Based Technique. *Medicina.*, 2009 Vol 15 N° 1, pag.18-33

Amini Nick S, Kim Van Dam K, Zambrano H, J Cassiman J.J., Tejpar S. Wnt / B-Catenin activation leads to combined proliferative and apoptotic responses in mesenchymal cells: A matter of dosage (In press)

Amini Nik S, Van Dam K, PourEbrahim R, Zambrano H, Tejpar S, Cassiman J J, Aggressive fibromatosis, pathways that cross-talk with Wnt Signaling . European Human Genetics Conference (EHGC). Amsterdam. April, 2006. (Poster)

Zambrano H, S. Amini Nik S, R. Pourebrahim R, J.J. Cassiman JJ , S Tejpar S Differential Effects of Activations of WNT Signaling on primary and immortalized cultured cells. Spanish Society of Biochemistry and Molecular Biology 29th Scientific Sessions, Elche . September, 2006 (Poster)

Zambrano H, Burgos R, Ruiz JC. Cytogenetic Studies in Pediatric Patients with Acute Lymphoblastic Leukemia. Medicina., 2003 Vol 8 N° 1, pag.18-33

Zambrano H. Utility of Viral Load Measurements in patients with HIV infection. Medicina 2004, Vol 9, N° 1, pag, 88-93

Zambrano H, García X, Almeida F, Burgos R. Detection of the SIL-TAL translocation in a patient affected with Acute Lymphoblastic Leukemia. Oncología 2004, Vol 14, N°1-2 pag 96-99

Projects involved in:

“Use of triplex-forming oligonucleotides to induce gene modifications in keratin 6a-YFP chimeric reporter in tissue culture cells” Principal Investigator: Leonard Milstone, M.D. Agency: NIH and Pachyonichya Congenita Project Role: Co-Investigator Type: Training Grant (NIH) Period: July 1, 2008 to July 31, 2010. The major goal of this project is to investigate the role of small oligonucleotides to correct dominant negative gene defects in keratinocytes “Detection of genetic alterations related to ichthyosis in a group of Ecuadorian patients” Principal Investigator: Martha Montalvan, M.D.

Agency: SINDE (internal funding agency, Universidad Católica de Santiago de Guayaquil) Role: Co-Investigator Type: Seed Fund. Period: July 1, 2009 to July 31, 2010 The major goal of this project is to elucidate the molecular alterations related to ichthyosis in a cohort of Ecuadorian patients “HPV Genotyping in cervical samples from women attending the Colposcopy service at a Reference Hospital in Guayaquil, Ecuador” Principal Investigator: Hector Zambrano, M.D., M.Sc.

Agency: VLIR Type: Own Initiative Period: October, 2007 to October 2008. The major goal of this project is to elucidate the most common types of HPV in one of the biggest reference centers in Guayaquil, Ecuador

Name: Bhola Kumar Dahal; Year of graduation in IPMB: 2003

Positions held since graduation: (dates, place&)

Post doctoral fellow, University of Giessen Lung Centre (UGLC), Germany, 2008 to date

Major tasks:

Preclinical studies of pulmonary hypertension with focus on pathobiology and therapeutics, and guiding doctoral students and technical staffs.

Did you finish a PhD ?: Yes

Doctorate of Philosophy, Human biology, 2008

International Graduate Program "Molecular Biology and Medicine of the Lung (MBML)", Nov, 2003 - Oct, 2005, Justus-Liebig University, Giessen, Germany

List of publications:

- **Dahal BK**, Kosanovic D, Lai YJ, Pamarthi PK, Kast R, Stasch JP, Ghofrani HA, Weissmann N, Grimminger F, Seeger W and Schermuly RT. Therapeutic Efficacy Of A Novel Rho Kinase Inhibitor Azaindole-1 In Experimental Pulmonary Hypertension. (**Eur Respir J., In revision**)
- **Dahal BK**, Cornitescu T, Tretyn A, Pullamsetti SS, Kosanovic D, Dumitrascu R, Ghofrani HA, Weissmann N, Voswinckel R, Banat GA, Seeger W, Grimminger F and Schermuly RT. Role of Epidermal Growth Factor Inhibition in Experimental Pulmonary Hypertension. **Am J Respir Crit Care Med.** 2010 Jan 15; 181(2):158-67.
- Weissmann N, Hackemack S, **Dahal BK**, Pullamsetti SS, Savai R, Mittal M, Fuchs B, Medebach T, Dumitrascu R, van Eickels M, Ghofrani HA, Seeger W, Grimminger F and Schermuly RT. The soluble guanylate cyclase activator HMR1766 reverses hypoxia-induced experimental pulmonary hypertension in mice. **Am J Physiol Lung Cell Mol Physiol.** 2009 Oct; 297(4):L658-65.
- Markart P, Ruppert C, Wygrecka M, Colaris T, **Dahal BK**, Walmrath D, Harbach H, Wilhelm J, Seeger W, Schmidt R, Guenther A. Patients With ARDS Show Improvement But Not Normalization Of Alveolar Surface Activity With Surfactant Treatment: Putative Role Of Neutral Lipids. **Thorax.** 2007 Jul; 62(7):588-94.
- Raes G., Brys L., **Dahal BK**, Brandt J., Grooten J., Brombacher F., Vanham G., Noel W., Bogaert P., Boonefaes T., Kindt A., Bergh R.V., Leenen P.J.M., De Baetselier P. and Ghassabeh R.H. Macrophage Glactose-Type C-Type Lectins As Novel Markers For Alternatively Activated Macrophages Elicited By Parasitic Infections And Allergic Airway Inflammation.**J. Leukoc Biol.** 2005 Mar; 77(3):321-7.

Projects involved in:

Pathobiology and Therapeutics of experimental pulmonary hypertension

Name: Alice Matimba; **Year of graduation in IPMB:** 2003

Positions held since graduation: Research Scientist

Major tasks: Molecular Biology, Genetics Research

Did you finish a PhD?: Yes

List of publications:

1: Mao M, Matimba A, Scordo MG, Gunes A, Zengil H, Yasui-Furukori N, Masimirembwa C, Dahl ML. Flavin-containing monooxygenase 3 polymorphisms in 13 ethnic populations from Europe, East Asia and sub-Saharan Africa: frequency and linkage analysis. *Pharmacogenomics*. 2009 Sep;10(9):1447-55. PubMed PMID: 19761368.

2: Matimba A, Del-Favero J, Van Broeckhoven C, Masimirembwa C. Novel variants of major drug-metabolising enzyme genes in diverse African populations and their predicted functional effects. *Hum Genomics*. 2009 Jan;3(2):169-90. PubMed PMID: 19164093.

3: Sirugo G, Hennig BJ, Adeyemo AA, Matimba A, Newport MJ, Ibrahim ME, Ryckman KK, Tacconelli A, Mariani-Costantini R, Novelli G, Soodyall H, Rotimi CN, Ramesar RS, Tishkoff SA, Williams SM. Genetic studies of African populations: an overview on disease susceptibility and response to vaccines and therapeutics. *Hum Genet*. 2008 Jul;123(6):557-98. Epub 2008 May 30. Review. Erratum in: *Hum Genet*. 2008 Sep;124(2):195. PubMed PMID: 18512079.

4: Zawaira A, Matimba A, Masimirembwa C. Prediction of sites under adaptive evolution in cytochrome P450 sequences and their relationship to substrate recognition sites. *Pharmacogenet Genomics*. 2008 Jun;18(6):467-76. PubMed PMID: 18496126.

5: Matimba A, Oluka MN, Ebeshi BU, Sayi J, Bolaji OO, Guantai AN, Masimirembwa CM. Establishment of a biobank and pharmacogenetics database of African populations. *Eur J Hum Genet*. 2008 Jul;16(7):780-3. Epub 2008 Apr 2. PubMed PMID: 18382479.

Projects involved in: Cancer Pharmacogenomics, Mayo Clinic, USA

Name: Sabelle Jallow; Year of graduation in IPMB: 2003

Positions held since graduation: (dates, place&)

2004-2008: PhD - university of Antwerp, Institute of Tropical Medicine, Medical Research Council, The Gambia (Sandwich programme)

2004-2009: Medical Research Council, The Gambia Higher Scientific Officer, PI drug resistance programme

2009-present: University of Oxford Postdoctoral scientist

Major tasks: Responsible of Drug resistance programme in the Gambia

Did you finish a PhD?: Yes in 2008

List of publications:

Virological Response to Highly Active Antiretroviral Therapy in Patients Infected with Human Immunodeficiency Virus Type 2 (HIV-2) and in Patients Dually Infected with HIV-1 and HIV-2 in The Gambia and Emergence of Drug-Resistant Variants. **Sabelle Jallow**, Abraham Alabi, Ramu Sarge-Njie, Kevin Peterson, Hilton Whittle, Tumani Corrah, Assan Jaye, Matthew Cotten, Guido Vanham, Samuel J. McConkey, Sarah Rowland-Jones and Wouter Janssens. *J. Clin. Microbiol.*; , July 2009, 47(7):2200–2208

Presence of a Multidrug-Resistance Mutation in an HIV-2 Variant Infecting a Treatment-Naive Individual in Caio, Guinea Bissau. **Sabelle Jallow**, Tim Vincent, Aleksandra Leligdowicz, De Silva Thushan, Carla Van Tienen, Abraham Alabi, Ramu Sarge-Njie, Peter Aaby, Tumani Corrah, Hilton Whittle, Assan Jaye, Guido Vanham, Sarah Rowland-Jones and Wouter Janssens. *Clin. Infect. Diseases*, 15 June 2009; 48:1790–3

OPINION PIECE: A Call for Randomized Controlled Trials of Antiretroviral Therapy for HIV-2 Infection in West Africa. Geoffrey S. Gottlieb, Serge-Paul Eholié, John N. Nkengasong, **Sabelle Jallow**, Sarah Rowland-Jones, Hilton C. Whittle and Papa Salif Sow. *AIDS*; Oct. 2008; 22(16):2069-72.

Optimization of the Oligonucleotide Ligation Assay (OLA), a Rapid and Inexpensive Test for Detection of HIV-1 Drug-Resistance Mutations, for Non-B Subtypes. Ingrid A. Beck, Claudia Crowell, Robin Kittoe, Helba Bredell, Molefe Machaba, Carolyn Williamson, Wouter Janssens, **Sabelle Jallow**, Guido van der Groen, Yiming Shao Mini Jacob, NM Samuel, Ivette Lorenzana de Rivera, Nicole Ngo-Giang-Huong, Sharon Cassol, George Alemnji, and Lisa M. Frenkel. *J. Acquir Immune Defic Syndr.* Aug 2008; 48 (4) :418-27.

Development and evaluation of an Oligonucleotide Ligation Assay for the detection of drug resistance associated mutations in the HIV-2 pol gene. **Jallow S**; Kaye S; Schutten M; Brandin E; Albert J; McConkey S.J; Corrah T; Whittle H; Vanham G; Rowland-Jones S; Janssens W. *J. Clin. Microbiol.*; May 2007, 45(5):1565-1571.

Virological and immunological response to Combivir and emergence of drug resistance mutations in a cohort of HIV-2 patients in The Gambia. **Jallow S**; Kaye S; Alabi A; Aveika A; Sarge-Njie R; Sabally S; Corrah T; Whittle H; Vanham G; Rowland-Jones S; Janssens W; McConkey S.J. *AIDS*; June 26, 2006; 20(10):1455-1458.

Vigorous but Short-Term Gamma Interferon T-Cell Responses against a Dominant HLA-A*2–Restricted Measles Virus Epitope in Patients with Measles. Jaye A, Herbert CA, **Jallow S**, Atabani S, Klein MR, Hoogerhout P, Kidd M, Van Els CACM, Whittle HC. *J of Virology* 2003; 77:5014-5016.

Projects involved in:

Drug resistance programme (The Gambia) Trim5 α study HIV-2 antigen processing studies for vaccine design

Name: Atunga Nyachio; Year of graduation in IPMB: 2004

Positions held since graduation: (dates, place&)

- PhD student KULeuven, Belgium (Since 2005)
- Research Scientist, Institute of Primate Research, Nairobi, Kenya (Since 2006)

Projects involved in:

- **Co-investigator:** Assisted reproduction project funded by Serono International USA (2005-2010) and by KULeuven Interfaculty council for development co-operation university Council (IRO, Leuven, Belgium) collaborative project with Institute of Primate Research, Nairobi
- **Principal Investigator:** Rotavirus project funded by Merck Inc, USA (2009-2011)

Major tasks:

- Proposal writing
- Project implementation

Did you finish a PhD?:

- Final year PhD student (**Doctoral thesis submitted**) -Faculty of Medicine; Catholic University of Leuven (KULeuven, Belgium)
- Doctoral degree expected before June 2010 (**PhD in Biomedical science**)

List of publications, seminars and conferences:

a) Seminars/courses attended:

- Good clinical practice, GCP, Course: Sponsored by Medical research council of South Africa and the WHO. East London, South Africa. Course coordinator; Prof. Justus Hofmeyr, 19th July 2008
- Frontiers in Reproduction course: Marine Biological Laboratory, Woods Hole, MA, USA, 3rd May-15th June 2008.
- TDR/WHO sponsored workshop training on biomedical research planning and evaluation (skill building course). Institute of Primate Research, Nairobi, Kenya; Facilitator. Dr. Hastings Ozwara, IPR, 5th -8th Sept 2006
- Cell biology course (KUL, course); Faculty of Medicine; University hospital Gusthuisberg, Leuven, Leuven Belgium: Course co-ordinator Prof. Wim Annaert; 28th February – 3rd May, 2006

- Science and Society course (KUL, course); Faculty of Medicine; University hospital Gusthuisberg, Leuven, Belgium: Course co-ordinator Prof. B. Nemery 17th Feb- 3rd March, 2006
- Research methods course: Sponsored by Medical research council of south Africa and the WHO. East London, South Africa. Course coordinator; Prof. Justus Hofmeyr; 17th -19th July 2008
- Capacity building and grant making seminar: Health Research Capacity Strengthening Initiative for Kenya-Implementation and Learning Phase by Professor Gilbert Kokwaro, Ph.D Fellow, African Academy of sciences, TRUST Consortium for National Health Research Program. Seminar presented at Institute of Primate research, Kenya, 2nd October 2008
- WHO/TDR sponsored workshop training on train-the-trainer (TTT) course on biomedical research planning and evaluation. KARI-TRC, Nairobi, Kenya; Facilitator Dr. Phoebe Mukiri- 2nd -5th March ; 2009

b) Abstracts presented in international meetings/conferences

- Kiulia N.M, Peenze I, **Nyachio A.**, Steele AD, Mwenda J.M. Predominant rotavirus Strains in Maua, Kenya. Presented at the 17th IPR Scientific Conference, 14th – 15th November 2007, KCCT, Mbagathi, Kenya
- Kiulia N.M, **Nyachio A.**, Njiru P.N, Mwenda J.M. Molecular characterization of the rotavirus Strains prevalent in Maua, Meru North district, Kenya. Presented at the Department of Health sciences and biotechnology, Kenya Polytechnic University College, 24th April 2007
- Kiulia N.M, Kamenwa R, Irimu G, Nyangao J.O, Gatheru R, **Nyachio A**, Mwenda J.M. The Epidemiology of Human Rotavirus associated with Diarrhoea in Kenya. Poster presented at the 4th Africa Rotavirus Symposium Mauritius, July 16th -17th 2008
- Kiulia N.M, Peenze I, **Nyachio A.**, Steele AD, Mwenda J.M. Molecular characterization of the rotavirus Strains in Eastern Region, Kenya. Presented during the 8th Rotavirus Workshop in Diarrhoeal Pathogens Research Unit, University of Limpopo, South Africa. 22nd May 2008
- **Nyachio A**, Spiessens CS, Chai DC, Mwenda JM, D’Hooghe TM. Progress of in vitro fertilization research using the baboon as a model at the Institute of Primate Research, Kenya. Oral presentation at the 8th East, Central and Southern Africa association for obstetrical and gynaecological societies conference, Sarova Whitesands Hotel, Mombasa. 18th -22nd Feb; 2009
- **Nyachio A**, Spiessens C, Debrock S, Chai D, Mwenda JM, D’Hooghe TM.
- Baboon model for in vitro fertilization: current status and future perspective. Oral presentation at the 11th Annual Symposium on Frontiers in Reproduction, Marine Biological Laboratory, Woods Hole, MA, USA, 12th-14th June 2008.
- **Nyachio A**, Spiessens CS, Mwenda JM, Debrock S, Chai DC, Kiulia NM, Hussein M, D’Hooghe TM. Prospective randomized study in Olive baboons (*Papio anubis*) on the effect of adding agonist to clomiphene citrate protocol for ovarian stimulation. Oral presentation at the 32nd Annual Meeting of the Kenya Obstetrical & Gynaecological Society (KOGS), Intercontinental hotel, Nairobi, 20th -22nd February 2008.

- **Nyachio A.**, Spiessens C., Daniel C. Chai DC., Mwenda JM., D’Hooghe TM. Baboon serum (BaS) containing medium for capacitation enhances baboon sperm motility and zona binding ability compared to human serum albumin (HSA) and bovine serum albumin (BSA). Oral presentation: Presented in 17th Institute of Primate Research (IPR) Scientific Conference, Nairobi, Kenya on 14-15th November; 2007
- Kiraithe M, **Nyachio A**, Kiulia NM, Galo M, Omolo E, Mwenda JM. Short term effects of khat on sperm parameters and blood pressure: A prospective study in olive baboons (*Papio anubis*) Oral presentation: Presented in 17th Institute of Primate Research (IPR) Scientific Conference, Nairobi, Kenya on 14-15th November; 2007
- **Nyachio A.**, Mwenda JM., Spiessens C., Chai DC., D’Hooghe TM. The Baboon model for Reproductive Research at the Institute of Primate Research, Nairobi, Kenya: Development of baboon model for in vitro fertilization (IVF) studies. Oral presentation: Presented in Sero Symposium on clinical frontiers in human reproduction: models in primate research, Toronto, Canada on 21st March; 2006
- Spiessens C., Debrock S., **Nyachio A.**, D’Hooghe TM. Success rate of single embryo transfer (SET) on day 3 versus day 5. Poster presentation: Presented in Gynaecologic and Obstetrics Congress, Toronto, Canada on 22nd-25th March; 2006

c) Manuscripts Published

- Kiulia NM, Nyaundi JK, Peenze I, **Nyachio A**, Musoke RN, Steele AD, Mwenda JM. Rotavirus infections among HIV-infected children in Nairobi, Kenya. *J Trop Pediatr.* 2009;55(5):318-23.
- Kiulia NM, Kamenwa R, Irimu G, Nyangao JO, Gatheru Z, **Nyachio A**, Steele AD, Mwenda JM. The epidemiology of human rotavirus associated with diarrhoea in Kenyan children: a review. *J Trop Pediatr.* 2008 Dec;54(6):401-5.
- Kiulia NM, Mwenda JM, **Nyachio A**, Nyaundi JK, Steele AD, Taylor MB. Astrovirus infection in young Kenyan children with diarrhoea. *J Trop Pediatr.* 2007 Jun;53(3):206-9.
- Kiulia NM, Peenze I, Dewar J, **Nyachio A**, Galo M, Omolo E, Steele AD, Mwenda JM. Molecular characterisation of the rotavirus strains prevalent in Maua, Meru North, Kenya. *East Afr Med J.* 2006 Jul;83(7):360-5.
- Arimi MM, **Nyachio A**, Langat DK, Abdi AM, Mwenda JM. Evidence for expression of endogenous retroviral sequences on primate reproductive tissues and detection of cross-reactive ERVS antigens in the baboon ovary: a review. *East Afr Med J.* 2006 Feb;83(2):106-12.
- Mwenda JM, **Nyachio A**, Langat DK, Steele DA. Serological detection of adenoviruses in non-human primates maintained in a colony in Kenya. *East Afr Med J.* 2005 Jul;82(7):371-5.
- **Nyachio A**, VAN Overmeir C, Laurent T, Dujardin JC, D’Alessandro U. Plasmodium falciparum genotyping by microsatellites as a method to distinguish between recrudescence and new infections. *Am J Trop Med Hyg.* 2005 Jul;73(1):210-3.
- **Nyachio A.**, Spiessens C., Chai DC., Mwenda JM., D’Hooghe TM (2009). Improving ovarian stimulation for IVF in baboons: lessons from humans and rhesus monkeys. *Anim Reprod Sci.*110(3-4):187-206.

- **Nyachio A**, Chai DC, Deprest J, Mwenda JM, D'Hooghe TM (2007). The baboon as a research model for the study of endometrial biology, uterine receptivity and embryo implantation. *Gynecol Obstet Invest* 2007; 64(3); 149-55
- D'Hooghe TM, **Nyachio A**, Chai DC, Kyama CM, Spiessens C, Mwenda JM (2008). Reproductive research in non-human primates at Institute of Primate Research in Nairobi, Kenya (WHO Collaborating Center): a platform for the development of clinical infertility services? *Hum Reprod* 2008; doi:10.1093/humrep/den164.
- **Nyachio A**, Spiessens C, Chai DC, Mwenda JM, D'Hooghe TM (2009). Menstrual cycle synchronization, ovarian stimulation and in vitro fertilization in olive baboons (*Papio anubis*): a prospective randomized study. *Fertil Steril*. 91(2):602-10.
- **Nyachio A.**, Spiessens C., Daniel C. Chai DC., Mwenda JM., D'Hooghe TM (2009). Baboon serum is superior to human or bovine serum albumin for baboon sperm capacitation and zona binding. *J Med Primatol*. 38(2):145-50.
- **Nyachio A**, Kiulia NM, Arimi MM, Chai DC, Mwenda JM. Vaginal histological changes of the baboon during the normal menstrual cycle and pregnancy. *East Afr Med J*. 2009 Apr;86(4):166-72.
- **Nyachio A**, Spiessens C, Chai DC, Kiulia NM, Mwenda JM, D'Hooghe TM. Separate and combined effects of caffeine and dbcAMP on olive baboon (*Papio anubis*) sperm. *J Med Primatol*. 2010 Jan 25. [Epub ahead of print]

Name: **Nonsikelelo Mpofo**; Year of graduation from IPMB: **2004**

Positions held since graduation: Postdoc Research Fellow (July 2009 to present)

Clinic of Gastroenterology, Hepatology and Endocrinology

Hannover Medical School

Hannover Germany

Major tasks: Conducting research and in the future training PhD and Masters students

Did you finish a PhD ?: Yes. I graduated June 12th 2009 with a PhD in Immunology from the Hannover Medical School

Thesis Title :- Beta cell antigen-specific Foxp3 transduced T cells for therapy of Type 1 diabetes

List of publications:

Raes G, Ghassabeh GH, Brys L, **Mpofo N**, Verschueren H, Vanhecke D, De Baetselier P. 2007. The metastatic T cell hybridoma antigen /P-selectin glycoprotein ligand 1 is required for hematogenous metastasis of lymphomas. *Int.J. Cancer* 121:2646-2652.

Jaeckel E, **Mpofu N**, Saal N, Manns MP. 2008. Role of regulatory T cells for the treatment of Type 1 diabetes mellitus. *Horm Metab Res.* 40 (2):126-36 Review

Pilat N, Baranyi U, Klaus C, Jaeckel E, **Mpofu N**, Wrba F, Golshayan D, Muenhlbacher F,

Wekerle T. 2010. Treg-Therapy Allows Mixed Chimerism and Transplantation Tolerance Without Cyto-reductive Conditioning. *Am J Transplant.* Feb 10. [Epub ahead of print]

Mpofu N, Hardtke-Wolenski M, Schambach A, Saal N, Baum C, Manns M.P, Jaeckel E. Small numbers of antigen-specific regulatory T cells prevent diabetes by long-term persistence and infectious tolerance without compromising general immunocompetence. Submitted for publication.

Projects involved in:

PhD project:- Beta cell antigen-specific Foxp3 transduced T cells for therapy of Type 1 diabetes

Postdoctoral Project:- Deciphering mechanisms of tolerance induction by regulatory T cells during the pathogenesis of type 1 diabetes

Name: Shu Hu; Year of graduation in IPMB: 2004

Positions held since graduation:

Ph.D student in faculty of medicine in K.U.Leuven, Belgium. Now, associate professor in China.

Major tasks: doing research in the field of neurogenetics using *Drosophila* as model

Did you finish a PhD?: Yes, got Biomedical Science Doctorate in 2009

List of publications:

<<http://pubmed/19165344>>Integrating computational biology and forward genetics in *Drosophila*.

Projects involved in: one, found modifiers of proneural gene *atonal*; second, functional analysis of *tap* gene in *Drosophila* neurogenesis.

Name: NGO XUAN TUYEN; Year of graduation in IPMB: 2004

Positions held since graduation: (dates, place&)

10/2004, Supervisor of Laboratory of Molecular Biology, Research Institute for Aquaculture No. 2 (RIA2), Vietnam.

Major tasks: Implementing molecular tools in aquaculture including to study aquatic animal diseases (virus, bacteria, fungi, ...), diagnosis and developing diagnostic tools, species identification, genetics and genetics diversity for breeding program for aquatic animals.

Did you finish a PhD?: I'm now on the last year of PhD. study.

List of publications:

Microsatellite diversity and structure of the southeast Asian migratory catfish *Pangasius bocourti* in the Mekong river. Mekong magazine 2009, RIA2.

Projects involved in:

BILATERAL VIETNAMESE - BELGIAN PROJECT (2004 - 2006): Novel approaches for viral disease management in shrimp farming in Vietnam.

Name: Luu Thai Danh; Year of graduation in IPMB: 2004

Positions held since graduation: (dates, place&)

lecturer at Cantho University, Vietnam

Major tasks: teaching and doing research

Did you finish a PhD?: Not yet. I will complete PhD study in 2010

List of publications:

Luu Thai Danh, Paul Truong, Raffaella Mammucari, Tam Tran and Neil Foster. Vetiver grass, *Vetiveria zizanioides*: A choice plant for phytoremediation of heavy metals and organic wastes. International Journal of Phytoremediation, 11:664691, 2009.

Luu Thai Danh, Raffaella Mammucari, Paul Truong and Neil Foster. Response surface method applied to supercritical carbon dioxide extraction of *Vetiveria zizanioides* essential oil. Chemical Engineering Journal 155 (2009) 617626.

Luu Thai Danh, Raffaella Mammucari, Paul Truong and Neil Foster. Economic incentive for

applying Vetiver grass to remediate lead, zinc and copper. *International Journal of Phytoremediation*. Article in Press.

Projects involved in: application of Vetiver grass for phytoremediation of contaminated soils

Name: Christian Dimkpa; Year of graduation in IPMB: 2005

Positions held since graduation: (dates, place&)

1. March 2006-April 2009, PhD Fellow, Max Planck Institute of Chemical Ecology, Jena, Germany

Major tasks: Research and training of undergraduate students

2. June 2009-Date, Postdoctoral Research Fellow, Biological Engineering Program, Utah State University, Logan Utah, USA

Major tasks: Research, scientific paper writing, and training of undergraduate students

Did you finish a PhD?: Yes (April 2009)

List of publications:

Peer-reviewed articles:

1.H.O. Oselebe and C.O. Dimkpa (2010) Parent-offspring relationships in *Musa* populations assessed by AFLP marker assays (submitted, *Theoretical and Applied Genetics*)

2. Dimkpa, C., Weinand, T., and Asch, F (2009) Plant-rhizobacteria interactions alleviate abiotic stress conditions, *Plant Cell & Environment* 32, 1682-1694.

3. Dimkpa, C.O., Merten, D., Svatoš, A., BÄchel, G., and Kothe, E (2009) Siderophores mediate reduced and increased uptake of cadmium by *Streptomyces tendae* F4 and sunflower (*Helianthus annuus*), respectively. *Journal of Applied Microbiology* 107: 1687–1696.

4. Dimkpa, C.O., Merten, D., Svatoš, A., BÄchel, G., and Kothe, E. (2009) Metal-induced oxidative stress impacting plant growth in contaminated soil is alleviated by microbial siderophores. *Soil Biology and Biochemistry* 41:154-162.

5. Dimkpa, C.O., Svatoš, A., Dabrowska, P., Schmidt, A., Boland W., and Erika Kothe (2008) Involvement of siderophores in the reduction of metal-induced inhibition of auxin synthesis in *Streptomyces* spp. *Chemosphere* 74: 19-25.

6. Dimkpa, C.O., Merten, D., Svatoš, A., BÄchel, G., and Kothe, E. (2008) Hydroxamate siderophores produced by *Streptomyces acidiscabies* E13 bind nickel and promote growth in

cowpea (*Vigna unguiculata* L.) under nickel stress. *Canadian Journal of Microbiology* 54: 163-172.

7. Ude, G. N., C.O. Dimkpa, P. O. Anegbeh, A. A. Shaibu, A. Tenkouano, M. Pillay & Z. Tchoundjeu (2006) Analysis of genetic diversity in accessions of *Irvingia gabonensis* (Aubry-Lecomte ex O'Rourke) Baill. *African Journal of Biotechnology* 5: 219-223

Book Chapters:

1. Erika Kothe, Christian Dimkpa, Gätz Haferburg, Andr  Schmidt, Astrid Schmidt, and Eileen Sch tze (2009) Streptomycete heavy metal resistance: extra- and intracellular mechanisms. In: *Soil Heavy Metals*. Sherameti, I. and Varma, A. (Eds.) *Soil Biology Series*, Springer.

2. Dimkpa C., Gherghel F., Haferburg G., Reinicke M., Schindler F., Schlunk I., Schmidt A., Sch tze E., Zeggel L., Merten D., B chel G., Kothe E (2009). The effect of acid mine drainage on soil microbiology. In *Sustainable agriculture for food, bio-energy and livelihood security*; Behl, R.K. et al (Eds). Jabalpur, India.

Projects involved in:

Investigating the impact of metallic nanoparticles on plants and plant-associated microbes

Name: TRAN Chi Nhan; Year of graduation in IPMB: 2005

Positions held since graduation:

From 10-2005 to 09-2006: researcher at Cuu Long Delta Rice Research Institute, Viet Nam

From 09-2006 to 04-2008: lecturer at Can Tho Technical Economic College, Viet Nam

From 04-2008 to date: PhD fellowship at University of Camerino, Italy

Major tasks:

Give lectures to students on the following courses: General Biochemistry, General Microbiology and Food safety, Heat and Mass Transfer

Did you finish a PhD?: I will finish my PhD course on 06-2011

List of publications:

Mara Giangrossi, Gianni Prosseda, Chi Nhan Tran, Anna Brandi, Bianca Colonna and

Maurizio Falconi (2010). A novel antisense RNA regulates at transcriptional level the virulence gene icsA of Shigella flexneri. Nucleic acid research

A manuscript entitled Study on erm(B) Mediated MLS Resistance in Streptococcus pyogenes Clinical Isolates□

Projects involved in:

Golden rice project which is focused on improvement the quantity of b-carotene on rice by using gene transformation method□. Funding from Bill Gate Foundation, USA.

Analyzing and controlling the pesticides residues on agricultural products as well as these polluted chemical reagents remaining in environment. Funding from JICAR, Japan and SAREC, Sweden

Name: FATOU NOHO-KONTEH ; Year of graduation in IPMB: 2006

Positions held since graduation:

March 2008 to date Medical Research Council(uk), The Gambia

Position: Scientific Officer/PhD student –

Infant Immunology Group, Viral Disease Programme

Major tasks: In addition to my PhD research, i am in charge of the laboratory work of the other aspects of project, training of laboratory technicians and BSc student from the Gambia and UK as well as supervising all the work being done in my research area. Interpretation and reporting of results from the various assays is a major part of my task. I am also involved in teaching within our group as part of an immunology/melecular biology continuing education programme. February 2007 to February 2008 – Bamyhan Hospital, Aga Khan Heealth Services, Afghanistan

Position: Laboratory Technical Advisor Major Task: I was responsible for training of Laboratory staff at AKHS-A clinics both in Afghanistan and in Tajikistan and ensure provision of effective, efficient, quality services, and implement quality assurance programmes. Laboratory development and Strategic planning was a major part of my job as

well as setting up new laboratories in other Health programme areas of AKHS-Afghanistan. I have started a PhD with the open university(UK) this January and will be completed in 2012.

List of publications:

KL Flanagan, A Halliday, S Burl, K Landgraf, J Townend, Ya Jankey Jagne, F Noho-Konteh, M van der Sande, DJ Miles, H Whittle, S Rowland-Jones. The effect of placental malaria infection on cord blood and maternal immunoregulatory responses at birth. Eur J Immunol (in press)

Dominique Beels, Chris Vereecken, Fatou Noho Kontech, Ann de Roo, Erika Vlieghe, Peter Bomans, Tine Vermoesen, Katrien Fransen, Luc Kestens and Pascale Ondo. Impact of co-infection with M. Tuberculosis on the recovery of regulatory T cells in HIV-1 infected during antiretroviral therapy (Abstract MSc)

Projects involved in:

Vaccine Interaction Study: Measle and Diptheria, tetanus, and pertussis vaccine interaction study which also looks at whether there are any sex differences seen when the different vaccine schedules of the Infant immunization programme are administered.

PhD Project: Do DTwP and measles vaccine

interact: effects on T cell memory and immune polarization (work is on-going)

MSC Project: Characterization of HAART- Induced Reconstitution of TB-Reactive T cells In HIV Patients (MSc)

Name: ALPHAXARD MANJURANO; Year of graduation in IPMB:2006

Positions held since graduation: (dates, place&)01-10-2006 TO DATE, SCIENTIST AT KILIMANJARO CHRISTIAN MEDICAL CENTRE, TANZANIA

01-10-2006 TODATE, PART TIME LECTURER- KILIMANJARO CHRISTIAN MEDICAL COLLEGE IN MOSHI, TANZANIA

OCT 2006 TO DEC 2009, MalariaGEN DATA FELLOW IN MOSHI IN COLLABORATION WITH LSHTM

Major tasks: HEAD OF LABORATORY AT JOINT MALARIA PROGRAMME DEPARTMENT AT KILIMANJARO CHRISTIAN MEDICAL CENTRE

TEACHING, SUPERVISING AND SUPERVISING STUDENTS

CARRY RESEARCH IN MOLECULAR BIOLOGY, IMMUNOLOGY AND GENETICS OF INFECTIOUS DISEASES

Did you finish a PhD?: Thesis to be submitted in two weeks to come

List of publications:

3.1 Alma Sykes, Ilse Hendriksen, George Mtove, Victor Manda, Hedwiga Mrema, Benadina Rutta, Ephraihim Mapunda, **Alphaxard Manjurano**, Ben Amos, Hugh Reyburn, Christopher JM Whitty. Azithromycin+artesunate compared with artemether-lumefantrine for treating uncomplicated malaria in Tanzanian children: a randomized controlled trial. *Clinical Infectious Diseases* **49**:1195-1201

3.2

Seif Shekalaghe, Michael Alifrangis, Charles Mwanziva, Anders Enevold, Steve Mwakalinga, Humphrey Mkali, Reginald Kavishe, **Alphaxard Manjurano**, Robert Sauerwein, Chris Drakeley and Teun Bousema(2009). Low density parasitaemia, red blood cell polymorphisms and *Plasmodium falciparum* specific immune responses in a low endemic area in northern Tanzania. *BMC Infectious Diseases*.9:69 doi:10.1186/1471-2334-9-69

Patrick H Corran, Jackie Cook, Caroline Lynch, Helene Leendertse, **Alphaxard Manjurano**, Jamie Griffin, Jonathan Cox, Tarekegn Abeku, Teun Bousema, Azra C Ghani, Chris Drakeley, Eleanor Riley (2008). Dried blood spots as a source of anti-malarial antibodies for epidemiological studies. *Malaria Journal* 2008, **7**:19

3.3 *Insight: A global network for investigating the genomic epidemiology of malaria.* Nature 456, 732-737

Tongren, J. E., Drakeley, C. J., McDonald, S. L. R., Reyburn, H. G., **Manjurano, A.**, Nkya, W. M. M., Lemnge, M. M., Gowda, C. D., Todd, J. E., Corran, P. H., Riley, E. M. (2006). Target Antigen, Age, and Duration of Antigen Exposure Independently Regulate Immunoglobulin G Subclass Switching in Malaria. *Infect. Immun.* 74: 257-264

Drakeley, C.J., Corran, P.H., Coleman, P.G., Tongren, J.E., McDonald, S.L.R., Carneiro, I., Malima, R., Lusingu, J.P., **Manjurano, A.**, Nkya, W.M.M.M., Lemnge, M.M., Cox, J., Reyburn, H.G. and Riley, E.M. (2005) Estimating medium and long terms trends in malaria transmission using serological markers of malaria exposure. *Proc. Nat. Acad. Sci.* 102:5108-13.

Mdegela R H, Karimuribo E, Kusiluka L J M, Kabula B, **Manjurano A**, Kapaga A M and Kambarage D M (2005). Mastitis in smallholder dairy and pastoral cattle herds in the urban and peri-urban areas of the Dodoma municipality in Central Tanzania. *Livestock Research for Rural Development. Volume 17, Article #123.* Retrieved November3, 2005

Mdegela, R.H., Kusiluka, L.J.M., Kapaga, A.M., Karimuribo, E., Turuka, F.M., Bundala, A., Kivaria, F., Kabula, B., **Manjurano, A.**, Torleiv, L and Kambarage, D.M. (2004). Prevalence and determinants of mastitis and milk borne zoonoses in smallholder dairy farming sector in Kibaha and Morogoro districts in eastern Tanzania. *Journal of Vet. Medicine B* 51,123-128. 2004 Blackwell Verlag, Berlin.

Manjurano, A., Karimuribo, E., Mdegela, R.H., Kusiluka, L.J.M., Kipanyula, M.J. and Kambarage, D. M. (2002). Prevalence of *Mycobacterium avium* subspecies *paratuberculosis* infection in cattle in the Southern highlands of Tanzania. *Joint TSAP/TVA Conference Proceedings* pg 351-359

Projects involved in:

Malaria genomic epidemiology network (MalariaGEN) aimed at identifying genetic variants associated with susceptibility/protection to malaria

Drug resistance in malaria

Name: Vo Thanh Thin; Year of graduation in IPMB: 2006

Positions held since graduation: Deputy head of Bacteriology Dept, Assurance quality officer Central Vietnam Veterinary Institute, Nha trang, Vietnam

Major tasks: Study on animal diseases caused by bacteria; control all test quality in the Lab

Did you finish a PhD?: No, I am going to defend my PhD thesis at the end of 2010.

List of publications:

1. Le Lap, Nguyen Duc Tan, Le Van Son, Le Dinh Hai, Vo Thanh Thin, 2007. Apply PCR for identification of toxinogen in *Clostridium perfringens* isolated from ruminal. *Journal of Agricultural and rural development*, 9/2007, 49-51.
2. Vo Thanh Thin, Nguyen Thi Anh Hung, Dang Van Tuan, Ngo Dang Nghia, 2008. Prevalence and Shiga-toxin gene profiles of *E. coli* strains isolated from beef in Nha Trang. *Veterinary sciences and techniques*, Vol. XV (3), 26-31.
- * Vo Thanh Thin, Ellen Ons, Nguyen Viet Khong, Bruno M. Goddeeris, 2008. Applying multiplex polymerase chain reaction in identification of iron-receptor genes of avian pathogenic *E. coli*. *Veterinary sciences and techniques*, Vol. XV (4), 60-65.
- * Vo Thanh Thin, Ellen Ons, Bruno M. Goddeeris, 2008. Identification of virulence factors of APEC isolated from colibacillosis on chicken in in Khanh Hoa and Phu Yen provinces. *Veterinary sciences and techniques*, Vol. XV (6), 38-43.
- * Vo Thanh Thin, Le Lap, Dang Thanh Hien, Dang Van Tuan, Nguyen Duc Tan, Henri de Greve, Bruno M. Goddeeris, Nguyen Viet Khong, 2008. Surveillance of antibodies against F4 and F18 fimbriae in pig serum collected in the central region and highland of Vietnam. *Journal of Agricultural and rural development*, 8/2008, 44-47.
- * Vo Thanh Thin, Le Dinh Hai, Dang Thanh Hien, Dang Van Tuan, Truong Cong Thoi, Nguyen Trong Hai, Vu Khac Hung, 2008. Prevalence and some virulence genes of *E. coli* isolated from diarrheic calves in central region and highland of Vietnam. *Journal of Agricultural and rural development*, 12/2008, 52-55.
- * Vo Thanh Thin, Le Dinh Hai, Dang Van Tuan, Truong Cong Thoi, Nguyen Trong Hai, Vu Khac Hung, 2009. Pathogen factors of *Salmonella* isolated from diarrheic calves in central region and highland of Vietnam. *Veterinary sciences and techniques*, Vol. XVI (2), 32-38.

- * Vo Thanh Thin, Dang Van Tuan, Nguyen Huu Hung, 2009. Application of the methods PCR-RFLP to determine variants of the attachment antigen F4 and F18 of E. coli. *Veterinary sciences and techniques*, Vol. XVI (5), 26-30.
- * Vo Thanh Thin, Dang Van Tuan, Le Dinh Hai, 2010. Identification of *Salmonella enteritica* serovar typhimurium caused diarrhea in calves by using PCR. *Veterinary sciences and techniques*, Vol. XVII (1), 34-37.
- * Vo Thanh Thin, Nguyen Duc Tan, Vu Khac Hung, 2009. Virulence factors in *Escherichia coli* isolated from calves with diarrhea in Vietnam. *Zoonoses and Public Health* (Submitted).
Projects involved in: Promoter of project "Genetic analysis of antimicrobial resistance in *Escherichia coli* isolated from diarrhea piglets". Duration: 2010-2011 Grant: Ministry of Agriculture and Rural development, Vietnam

Name: Samwel Ogado Odiwuor; **Year of graduation in IPMB:** 2006

Positions held since graduation:

January 2007 to December 2010: PhD studentship registered at the University of Antwerp, Belgium (UoA) but done in collaboration with the Institute of Tropical Medicine Belgium (ITG) and The Kenya Medical Research Institute (KEMRI), Nairobi, Kenya. Sandwich sponsored by the DGDC through the ITG

Major tasks: Pursuing the objectives of my PhD in the Development and evaluation of low-cost diagnostic tools for species identification and sub-species typing of *Leishmania* parasites. Also pursuing the objectives of the Doctoral Study program of the UoA such as attending trainings, training personal at KEMRI, conferences, seminars etc...

Did you finish a PhD?: In the final calendar year of PhD. Expected graduation date November 2010.

List of publications:

Several manuscripts are being prepared for submission this year.

Remarks on identification of amplified fragment length polymorphisms linked to SAG resistance in *Leishmania*. *Acta Tropica*, Volume 113, Issue 1, January 2010, Pages 92-93.
Gert Van der Auwera, Narayan Raj Bhattarai, Samwel Odiwuor, Marnik Vuylsteke

Projects involved in:

Was involved in the finished project of the European Union 6th Framework Program INCO-CT-2005-015379 (TRYLEIDIAG project). TRYLEIDIAG was Euro-African cooperation Network for research on Human African Trypanosomiasis and Leishmaniasis diagnostics development.

Name: Getnet Dino Adem; Year of graduation in IPMB: Sept. 2006

Positions held since graduation: (dates, place&)

2006-2008 –Assistance Researcher III (Holetta Agricultural Research Center)

2008-2010- Lecturer, Molecular Biology and Biotechnology (University of Gondar)

Major tasks: Administering Biotechnology and Molecular Biology courses, Curriculum designing and advising BSc students.

Did you finish a PhD ?: No

List of publications

Journal Articles

Gemechu Keneni, Musa Jarso, Tezera Wolabu and **Getnet Dino**. 2005. Extent and pattern of genetic diversity for morpho-agronomic traits in Ethiopian highland pulse landraces. I. Field pea (*Pisum sativum* L.). *Genetic Resources and Crop Evolution* 52: 539-549.

Gemechu Keneni, Musa Jarso, Tezera Wolabu and **Getnet Dino**. 2005. Extent and pattern of genetic diversity for morpho-agronomic traits in Ethiopian highland pulse landraces. II. Faba bean (*Vicia faba* L.). *Genetic Resources and Crop Evolution* 52: 551-561.

Himanen K., **Dino G.**, and Van Lijsebettens M. 2007. Genetic and epigenetic control of leaf size and shape. *Int. J. Plant Developm. Biol.* 1, 226-238.

Projects involved in: Currently I am not involved in any projects

Name: Ajeawung Norbert Fonya; IPMB graduating class: 2006.

After my graduation, I worked for two years and then move to Quebec -Canada for graduate studies. I am currently a PhD student at the department of Molecular and Cellular Biology, Université Laval, Quebec Canada. The IPMB program change my life and gave me a variety of options to move forward as a scientist. Stopping the IPMB program is another way of cutting the link between a mother and a fetus.

Name: Thomson Joseph SANUDI ; Year of graduation in IPMB: 2007

Positions held since graduation

Deputy Head of Basic Sciences, Department at Bunda College of Agriculture, a constituent college of the University of Malawi since 2008

Major tasks: Teaching undergraduates in Biology and Biotechnology and also assist in preparing courses and teach postgraduate course on Animal Biotechnology. Research activity has been in investigating avenue to improve higher education and improve agriculture productivity using modern technologies. Interest is also in improving human health using similar approach.

Did you finish a PhD? No

List of publications: Not yet but hope to publish two by the end of this year one on improving tertiary education and improving agriculture especially smallholder agriculture using available and promising technologies.

Testimony

IPMB is a very good program which is addressing a critical area which has not been explored in developing countries as Molecular Biology and Biotechnology offers modern solutions to prevailing problems in developing countries- Food and Health. It is no surprise that in recent years, the number of students applying for the scholarship has increased and also more and more students willing to study Molecular Biology and Biotechnology either as self sponsored or sponsored by other organizations and governments. The program is well structured even for able students with limited background in molecular biology. I strongly believe to be thinking of stopping the program at this point is not a good idea. In my opinion I would suggest in addition to the training that we get, the program should also be considering of building a strong network of graduates. The grants that graduates get should be increased, regularized and made less competitive if the impact of the program is to continue to be felt. It would also be good that during assessment of these grants, emphasis should be made on projects that address local problems and a theme can be developed that can be reviewed as need be. Projects that show collaboration among graduates should also be considered highly as such a regional network will be established and would show its significance easily.

Name: Patroba Ojola Odeny; Year of graduation in IPMB: 2007

Positions held since graduation: (dates, place&) Lecturer, Moi University, Kenya

Major tasks: Conducting practicals, supervising student projects, lecturing

Did you finish a PhD?: Not yet but just registered

List of publications: n/a

Projects involved in: engineering fungus resistant cassava in western Kenya

Name: HAI GIANG TRAN; Year of graduation in IPMB: 2007

Positions held since graduation: 09/2007-10/2008 - Faculty of Science, CanTho university
10.2008-present:

PhD student at Ugent

Major tasks: researcher

Did you finish a PhD: proceeding

List of publications: 1 article waiting for approving

Projects involved in: Directed evolution of carbohydrate active enzyme

Name: Himal Luitel; Year of graduation in IPMB: 2008

Positions held since graduation: (dates, place&): Ph. D. candidate, Molecular Biology and Medicine of the lungs (MBML), Justus-Liebig University, Giessen, Germany (October 2008 onward)

Major tasks: Animal work (rat and mice – pulmonary physiology), Histology and Molecular biology

Did you finish a PhD ?: Not yet, Running

List of publications: Not yet

Projects involved in: Role of progenitor cells in Pressure induced right ventricular remodeling

Name Trong Nguyen Duc; Year of graduation in IPMB: 2008

Positions held since graduation:

from 10/2008 Ph.D student in VUB, Researcher in Cantho University Major tasks: Study in field of Bio-engineering

Did you finish a PhD ? : Not Yet

Projects involved in: Nanobody-based Chromatin Immunoprecipitation

Name: Wilber Sabiiti; Year of graduation in IPMB: 2008

Positions held since graduation:

Oct 1st 2008 - Sept 27th 2009: Visiting researcher, Laboratory of Medical Microbiology, University of Antwerp, Belgium

Oct 5th 2009 - Sept 2012: PhD fellow, University of Birmingham, United Kingdom

Major tasks:

Did you finish a PhD?: On my PhD course

List of publications:**Projects involved in:**

1. While at University of Antwerp, I worked on MOSAR: Mastering of antimicrobial resistance and its spread into the community an European commission funded project. My focus was evaluation of commercially available molecular diagnostics for accurate detection of Methicillin resistant *Staphylococcus aureus* (MRSA).

2. Currently working on Identifying virulence mechanisms which enable the fungus, *Cryptococcus neoformans* penetrate the blood-brain barrier to cause brain infection. *C. neoformans* infection of the brain results in meningoencephalitis, a fatal condition when untreated. Today, *C. Neoformans* accounts for 650000 deaths very of mainly Immunocompromised people such as those with HIV/AIDS and on cancer chemotherapy. Understanding the mechanism of entry into the brain is a good basis for identify novel drug targets and improve the treatment of cryptococcosis both in the developed and resource poor countries.

Name: Fikru Regassa gari ; Year of graduation in IPMB: 2009

Positions held since graduation: (dates, place&):

Im currently working in Addis Ababa University, Faculty of Veterinary Medicine, as assistant professor.

Major tasks: knowledge transfer theoretically and practically, this is through teaching in class at under graduate level and the masters program that need knowledge of molecular techniques.

Research on animal diseases of economic importance in Ethiopia, which is directly related to food self sufficiency of the country, and to support the livelihood of Ethiopian farmers.

Did you finish a PhD?: I already got a PhD scholarship at Institute of tropical medicine Antwerp, Belgium. I will be coming soon.

List of publications: I already submitted one article from my thesis and preparing other one (most important aspect)

Projects involved in: control of equine trypanosomosis in Arsi- Bale Highlands of Ethiopia.

Name: Maxwell F.J. Chilije; Year of graduation in IPMB: 2009

Positions held since graduation: (dates, place):

Lecturer in Biochemistry and Animal Physiology, Department of Biology, University of Malawi, Chancellor College. February 2005 to date

Major tasks:

Lecturing in Biochemistry and Animal Physiology to undergraduate students, conducting scientific research for the development of the nation, and curriculum development.

Did you finish a PhD?: No.

List of publications: Nil

Projects involved in:

Developing Spatial Models for Mapping and Prediction of Urinary Schistosomiasis to Assist Geographical targeting of Control

Name: Rosina Gabriel Imiru; Year of IPMB graduation: 2009

Position after Graduation:

PhD student (will start in April 2010)

Did you finish your PhD?: No

List of Publications:

Rosina G, Estifanos K. Screening Nasal Carriage of Staphylococcus aureus and its drug sensitivity pattern among staff members of Jimma University Specialized Hospital. Ethiopian J of Health Sci., July 2007: 17 (2). (before IPMB)

Projects involved in:

The function of selected neuronal proteins in T cell development, T cell activation and immunological synapse. (PhD project title)

Name: DINA DANSO-ABEAM ; Year of graduation in IPMB: 2009

Positions held since graduation: (dates, place&) PhD since October 2009 at KULeuven

Major tasks: Student

Did you finish a PhD ?: No

Projects involved in: Autoimmune genetics

Name: NGUYEN THI LOAN ANH; Year of graduation in IPMB: 2009

Positions held since graduation: (dates, place&)

From 9/2009-now: teaching Biology course (for normal and advanced program), Genetics at department of Biology, College of Natural Sciences, CanTho University

Major tasks: teaching

Did you finish a PhD : no

List of publications: N/A

Projects involved in: N/A

Name: S. M. Abdul-Awal; Year of graduation in IPMB: 2009

Positions held since graduation: (dates, place&)

Assistant Professor Biotechnology & Genetic Engineering Discipline Life Science School

Khulna University Khulna 9208 Bangladesh, E-mail: sohagbge@yahoo.com

Major tasks: Teaching and Research

Did you finish a PhD ?: No

List of publications:

1. **S. M. Abdul-Awal**, M. J. Alam, M. R. Ali, M. N. Hasan, M. S. R. Basunia and S. M. M. Rahman, 2005. *In Vitro* propagation of pointed gourd (*Trichosanthes dioica Roxb.*) from shot tips. *Biotechnology*, 4 (3): 221-224.
2. M. M. Sagor, K. K. Islam, M. R. Ali, **S. M. Abdul-Awal**, P. P. Adhikari, and A. S. Md. Rakib, 2005. Bacteriophage: a potential therapeutic agent. *Journal of Medical Science*, 5 (1): 1-9.
3. M. A. Hossain, **S. M. Abdul-Awal**, S. K. Paul, M. R. Ali, M. A. S. Miah and K. M. Nasiruddin, 2003. Regeneration and Agrobacterium mediated genetic transformation of Sugarcane (*Saccharum officinarum*). *Journal of Agricultural Biotechnology*, 1(1&2): 39-47.

Projects involved in:

A study on the regulation of CO₂ fixation genes in The Bay of Bangal in concert with physiological and biochemical studies of marine cyanobacteria to address the global CO₂ fixation problem and subsequent biofuel production from algal biomass.

Name: Edward MOTO; Year of graduation in IPMB: 2009

Positions held since graduation: (dates, place&): Since October 2009, I have been working as a Livestock Research Officer at the National Livestock Research Institute, Mpwapwa in Tanzania.

Major tasks: To characterize and conserve indigenous livestock found in Tanzania as there is a fear for the indigenous livestock to be endangered due to invasion of exotic breeds. Therefore our institution has decided to have a study on local/indigenous breeds/strains of livestock to know how potential there are.

Did you finish a PhD?: NO

List of publications: Komwihangilo, D.M., **Moto, E.**, Mkonyi, J.I., Masao, D. F., Mahiza, A.M.O. and Mnzava V. (2009). Performance and challenges in the management of improved cattle in agropastoral systems of Central Tanzania. *Livestock Research for Rural Development*. Vol. 21 No.5 (Article #75). <http://www.lrrd.org/lrrd21/5/komw21075.htm>

Projects involved in: 1. Impact assessment of introduced Mpwapwa breed cattle in Central Tanzania in Chipogolo and Mtumba villages. Characterisation of the production traits and establishment of genetic potential of the indigenous Singida white cattle in Tanzania (Still on going project).

Name: Kabita Pradhan; Year of graduation in IPMB: 2009

Positions held since graduation: (dates, place&)

Oct 2009, PhD in Justus liebig university

Major tasks: Research

Did you finish a PhD?: No

List of publications: No

Projects involved in: Pulmonary hypertension