**CURRICULUM VITAE**

**Julio C. Barredo, M.D.**

Business Address: University of Miami Miller School of Medicine

 Mailman Center for Child Development

 Division of Pediatric Hematology-Oncology

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Miami, FL 33136

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Home Address: 1039 Nautica Dr.

 Weston, FL

 33327

Home Telephone: (954) 389-9929

Marital Status: Married

 Children: Two

Citizenship: US. Citizen

 Place of Birth: Peru.

**ACADEMIC & PROFESSIONAL DEGREES:**

B.A. 1981 Universidad Nacional Mayor de San Marcos, Lima, Peru

Major: Medicine

M.D. 1982 Universidad Nacional Mayor de San Marcos, Lima, Peru

**ACADEMIC BACKGROUND:**

High School: Colegio Sta. Rosa de Lima, Peru.

 1966-1970

Pre-Medical

Education and

Medical School: Universidad Nacional Mayor de San Marcos (UNMSM), Peru.

 01/1971-12/1980

Internship: Edgardo Rebagliatti Hospital (UNMSM) &

 Hospital del Nino (Children's Hospital), Peru.

 Rotating Internship.

 01/1980- 07/1981.

Social Service: Max Arias Schreiber Health Center,

 Peruvian Ministry of Health.

 08/1981- 02/1982.

Staff Physician: Peruvian Navy Hospital. Lima, Peru.

 03/1982-06/1984.

Pediatric

Internship: SUNY Downstate/Kings County Hospital.

 Brooklyn, New York.

 07/1984- 06/1985.

Pediatric

Residency: SUNY Downstate/Kings County Hospital.

 Brooklyn, New York.

 07/1985- 061987.

Pediatric Hem/

Onc Fellowship: Children's Hospital of Los Angeles/

 University of Southern California, LA, CA.

 07/1987- 06/1990.

Basic Research: Children's Hospital of Los Angeles/

 University of Southern California, LA, CA.

 Cancer Research Laboratory/Experimental

 Therapeutics. Mentor: Dr. Richard G. Moran.

 071988- 06/1991.

Res Associate: Children's Hospital of Los Angeles/

 Cancer Research Laboratory at the

 University of Southern California's

 Norris Comprehensive Cancer Center, LA, CA.

 071990-01/1991.

**ACADEMIC & PROFESSIONAL APPOINTMENTS:**

Clinical Assistant

Instructor: SUNY Downstate/Kings County Hospital.

 Brooklyn, New York.

 07/1984- 06/1987.

Instructor and

Res Associate: Medical University of South Carolina/

 The Children's Hospital, Charleston, SC.

 07/1991- 061991.

Assistant

Professor: Department of Pediatrics

 Medical University of South Carolina/

 The Children's Hospital, Charleston, SC.

 02/1991-06/1997.

Associate

Professor: Department of Pediatrics – Primary Appointment

 Medical University of South Carolina/

 The Children's Hospital, Charleston, SC.

 07/1997-06/2002.

Associate

Professor: Department Biochemistry and Molecular Biology

 Medical University of South Carolina

 Charleston, SC.

 07/1997-06/2002.

Academic

Tenure: Department of Pediatrics and Department of Biochemistry And Molecular Biology

Medical University of South Carolina/

 The Children's Hospital, Charleston, SC.

 07/2000-06/2006.

Professor: Department of Pediatrics – Primary Appointment

 Medical University of South Carolina/

 The Children's Hospital, Charleston, SC.

 07/2002-06/2006

Secondary Appointment

Professor: Department of Biochemistry and Molecular Biology

 Medical University of South Carolina

 Charleston, SC.

 07/2002-06/2006

Professor: Full Member

College of Graduate Studies

 Medical University of South Carolina

Charleston, SC

 07/2005-06/2006

Adjunct

Professor: Department of Biochemistry and Molecular Biology

 Medical University of South Carolina

 Charleston, SC.

 07/2006-06/2008

Professor: Department of Pediatrics

 Division of Hematology-Oncology

 University of Miami Miller School of Medicine

 Miami, FL

 08/2006-

Academic Tenure: Department of Pediatrics

 Division of Hematology-Oncology

 University of Miami Miller School of Medicine

 Miami, FL

 08/2006-

Secondary Appointment

Professor: Department of Biochemistry and Molecular Biology

 University of Miami Miller School of Medicine

 Miami, FL

 08/2007-

Graduate School University of Miami Miller School of Medicine

Faculty Miami, FL

 08/2007

Endowed Chair Toppel Family Endowed Chair in Pediatric

Hematology-Oncology:

 Department of Pediatrics

 Division of Hematology-Oncology

 University of Miami Miller School of Medicine

 Miami, FL

 08/2006-

**ADMINISTRATIVE LEADERSHIP POSITIONS:**

**1. Medical University of South Carolina**

Director, Ped Onc

Research Lab: Medical University of South Carolina

 Charleston, SC

 07/1998-07/2006

Director, Pediatric Department of Pediatrics

Brain Tumor Medical University of South Carolina/

Program The Children's Hospital, Charleston, SC.

 07/1998-06/2006.

Director, Pediatric Department of Pediatrics

Leukemia Medical University of South Carolina/

Laboratory Darby Children’s Research Institute

 7/2000-06/2006

Pediatric Hem- Department of Pediatrics

Onc Fellowship Medical University of South Carolina/

Training The Children's Hospital, Charleston, SC.

Director 07/2002-06/2006.

Director Department of Pediatrics

Pediatric Medical University of South Carolina/

Hematology The Children's Hospital, Charleston, SC.

Oncology 07/2002-06/2006.

Director Children’s Cancer Programs

Hollings Cancer Center

 Medical University of South Carolina

 Charleston, SC

 07/2004-07/2006

Director Centerfor Research of Childhood Cancer and Blood Disorders

Charles P. Darby Children’s Research Institute

 Medical University of South Carolina

 07/2004-07/2006

**2. Pediatric Oncology Group**

Member Acute Lymphoblastic leukemia Steering Committee

Director Pediatric Oncology Group Legacy T-cell ALL Study Reference Laboratory. 1999-2000

**3. Children’s Oncology Group**

Member Children’s Oncology Group ALL Disease Committee. 2000-

Member Children’s Oncology Group Lymphoid Relapse Biology Committee. 2000-

Member NIH-NCI Task Force for Protocol Development in Isolated CNS Relapse for ALL. POG/CCG Fusion Group. 1999-2001.

Member Children’s Oncology Group Voting Body Steering Committee. 2004-

**4. American Society of Pediatric Hematology-Oncology**

Chair ASPHO Membership Committee

 2012-

Chair Best of ASPHO Organizing Committee

 2013-

**5. University of Miami Miller School of Medicine**

Associate Chair, Department of Pediatrics

Basic Research University of Miami Miller School of Medicine

 Miami, FL

 08/2006-06/2014

Director Children’s Cancer Programs

UM Sylvester Comprehensive Cancer Center

: University of Miami Miller School of Medicine

 Miami, FL

 08/2006-

Program Leader UM SCCC Molecular Targets

And Developmental Therapeutics Research Program:

 University of Miami Miller School of Medicine

 Miami, FL

 O2/2007-06/2010

Program Co-Leader UM SCCC Molecular Targets

And Developmental Therapeutics Research Program:

 University of Miami Miller School of Medicine

 Miami, FL

 06/2010-06/2014

Member UM SCCC Molecular Targets

And Developmental Therapeutics Research Program:

 University of Miami Miller School of Medicine

 Miami, FL

 06/2014-

Vice-Chair Department of Pediatrics

Cancer Clinical University of Miami Miller School of Medicine

And Research Miami, FL

 07/2014

Founding Director Institute for Children and Adolescents with Cancer

Sylvester Comprehensive Cancer Center

University of Miami Miller School of Medicine

 Miami, FL

 06/2014-

**OTHER ADMINISTRATIVE APPOINTMENTS AND EXPERIENCE:**

Medical Director, Hematology-Oncology Out-Patient

Unit, MUSC Rutledge Tower

Clinics: Medical University of South Carolina

 Charleston, SC

 07/2000-07/2006

Medical Director, 7B In-Patient

Unit, MUSC Children’s

Hospital: Medical University of South Carolina

 Charleston, SC

 07/2002-07/2006

Medical Director JMH Pediatric Hematology-Oncology

and Bone Marrow Transplant Service:

UM Holtz Children’s Hospital

 Miami, FL

 08/2006-

Vice-President Florida Association of Pediatric Tumor Programs

 Term: 01/2007 to 12/2010

SDG Chair Pediatric Oncology

UM Sylvester Comprehensive Cancer Center

 Miami, FL

 08/2006-

Service Chief Pediatrics

UM Sylvester Comprehensive Cancer Center

 Miami, FL

 08/2009-

Medical Director Pediatric Hematology-Oncology Outpatient Clinic.

UM Sylvester Comprehensive Cancer Center

 Miami, FL

 03/2012-

**HONORS AND AWARDS:**

 Recipient McCallister Research Fellowship, University of Southern California, 1989.

*Award given for outstanding research proposal as a senior fellow in pediatric hematology-oncology. Research focused on understanding the differential sensitivity of ALL subtypes to antifolates therapy based on biochemical and pharmacological differences in the metabolism of antifolates polyglutamates. Mentor: Richard G. Moran, Ph.D.*

 Recipient Medical University of South Carolina Mitchell I. Rubin Junior Research Award, 1995.

*Competitive award given for outstanding research performance as a junior faculty in the Department of Pediatrics at MUSC. Research performed during this time focused on understanding the differential expression of the enzyme Folyl-polyglutamte synthetase in childhood ALL. This work resulted in a successful R-29 application funded by the NCI*

 Recipient Jolley Foundation Award. Research Award, 1998.

*Award by philanthropic organization for outstanding translational research project in childhood leukemia*

 Recipient Star Award, Make-a-wish Foundation of South Carolina, 2002.

*Award in recognition of work done in support of children with cancer and advocacy*

 Recipient Medical University of South Carolina Mitchell I. Rubin Senior Research Award, 2004.

*Competitive award given for outstanding research performance as a faculty in the Department of Pediatrics at MUSC. Research performed during this time focused on understanding the differential regulation of the gene that encodes for Folyl-polyglutamte synthetase in childhood ALL. This work was funded by an R01grant funded by the NCI*

 America’s Best Pediatricians. 2004

 International Who’s Who of Professionals. 2005.

 America’s Top Doctors for Cancer. 2005

 Castle Connolly Top Doctors 2006

 International Who’s Who of Professionals. 2006

 America’s Top Doctors for Cancer. 2006

 Toppel Family Endowed Chair in Pediatric Hematology-Oncology:

 Department of Pediatrics

 Division of Hematology-Oncology

 University of Miami Miller School of Medicine

 Miami, FL

 08/2006-

Recipient Mycah Batchelor Award for excellence in Child Health Research, 2007.

*Competitive award given for outstanding research project as a faculty in the Department of Pediatrics at the University of Miami. Research performed during this time focused on understanding the differential regulation of cellular energetic by AMPK in childhood ALL and establishing AMPK as a suitable target for ALL therapy. This work was resulted in a Translational Research Grant funded by the Leukemia & Lymphoma Society of America*

 Castle Connolly Top Doctors 2007

 International Who’s Who of Professionals. 2007

 America’s Top Doctors for Cancer. 2007

 International Who’s Who of Professionals. 2008

 America’s Top Doctors for Cancer. 2008

 Castle Connolly Top Doctors 2008

 Best Doctors in America 2007

*Listing of clinically and academic accomplished physicians reviewed and elected by their peers. Includes the top 5% of U.S. physicians*

 Cancer Researcher of the Year. UM Sylvester Women’s Cancer Association, 2008

*Award given in recognition of outstanding research performed during that year. Awarded by the Women’s Cancer Association of the University of Miami*

 International Who’s Who of Professionals. 2009.

 America’s Top Doctors for Cancer. 2009

 Castle Connolly Top Doctors 2009

 Castle Connolly Top Doctors 2009

 Best Doctors in America 2008

*Listing of clinically and academic accomplished physicians reviewed and elected by their peers. Includes the top 5% of U.S. physicians*

 Castle Connolly Top Doctors in Cancer 2009

 Best Doctors in America 2009

*Listing of clinically and academic accomplished physicians reviewed and elected by their peers. Includes the top 5% of U.S. physicians*

 Nominated, Man of the Year, Leukemia & Lymphoma Society of America, 2009

*In recognition of research and advocacy work done in support of children with hematological malignancies.*

 America’s Top Pediatrician’s 2010

 Castle Connolly Top Doctors in Cancer 2010

 Castle Connolly Top Doctors 2010

 Castle Connolly Top Doctors in Cancer 2011

 Best Doctors in America 2010

*Listing of clinically and academic accomplished physicians reviewed and elected by their peers. Includes the top 5% of U.S. physicians*

 America’s Top Pediatrician’s 2011

 Castle Connolly Top Doctors in Cancer 2011

 Castle Connolly Top Doctors 2011

 International Who’s Who of Professionals. 2011

 Castle Connolly Top Doctors in Cancer 2012

 Best Doctors in America 2011

*Listing of clinically and academic accomplished physicians reviewed and elected by their peers. Includes the top 5% of U.S. physicians*

 America’s Top Pediatrician’s 2012

 Castle Connolly Top Doctors in Cancer 2012

 Castle Connolly Top Doctors 2012

 America’s Top Oncologists 2012

 US News & World Report. Top 1% in Pediatric Oncology. 2012

*Selected based on peer nomination as the best pediatric hematology-oncology physicians in the U.S.*

 Best Doctors in America 2012

*Listing of clinically and academic accomplished physicians reviewed and elected by their peers. Includes the top 5% of U.S. physicians*

US News & World Report. Top 1% in Pediatric Oncology. 2013

*Selected based on peer nomination as the best pediatric hematology-oncology physicians in the U.S. (only 176 physicians in this specialty in North America are currently included in this category)*

Best Doctors in America 2013

*Listing of clinically and academic accomplished physicians reviewed and elected by their peers. Includes the top 5% of U.S. physicians*

**LICENSURE:**

Peru: CMP # 14553

California: # A 045751

South Carolina: #15335

Florida: # ME96664

**IMG CERTIFICATION EXAMS:**

ECFMG: Certified in Jan. 1982.

VQE: Certified in Sept. 1983.

FLEX: Certified in Dec. 1982 (California).

**MEDICAL SPECIALTY BOARD CERTIFICATION:**

 Diplomate of the American Board of Pediatrics: #41965.

Recertification: General Pediatrics #41965, 1999 (Valid for the Period 2000-2006).

 Diplomate of the American Sub-Board of Pediatric Hematology-Oncology: #967.

Recertification: Pediatric Hematology-Oncology #967. 1998 (Valid for the Period 2000-2006).

Recertification: Pediatric Hematology-Oncology #967. November 2005 (Valid for the Period 2007-2016).

**OTHER CERTIFICATION:**

National Board of Medical Examiners, certified though FLEX; 1982

Federal Controlled Substances Registration Certificate – current 2014

American Heart Association Basic Life Support for Healthcare Provider Certificate; expiration November 2013

Pediatric Advanced Life Support for Healthcare Provider Certificate; expiration May 2015

CITI Collaborative Institutional Training Initiative. Protection of Human Subjects; expiration 3/3/2014

CITI Collaborative Institutional Training Initiative. Institutional Animal Care and Use Committee; expiration 5/30/2014

BLS Re-Certified, AHA Approved Course; November 2013

PALS Re-Certified, AHA Approved Course; December 2013

**CONTINUING PROFESSIONAL EDUCATION**

Participant 2003 Spring Institute Hospital Department Chairs. American College of Physician Executives. April 2003

Participant Leadership Development for Physicians in Academic Health Centers. Harvard School of Public Health. Boston, MA. November 2003

*Top-rated leadership development program in the U.S. The Program’s overall objective is to enhance and develop participants’ leadership abilities and effectiveness. Applicants to the program need to be recommended and nominated by the Chair of Pediatrics. Admission to this intensive residential program is competitive and limited to top nominees that are selected by the course faculty at the Harvard School of Public Health*

**CLINICAL EXPERIENCE AND RESPOSIBILITIES:**

 MUSC Clinical Staff Member 1991-2006

*Attending physician in charge of caring for pediatric hematology-oncology patients and pediatric stem cell transplant patients.. Specific duties include attending in the MUSC pediatric oncology/SCT service and MUSC pediatric sickle cell service.*

Member, Hollings Cancer Center, Medical University of South Carolina. 1991-2006.

University of Miami Medical Staff 2006-

*Attending physician in charge of caring for pediatric hematology-oncology patients and pediatric stem cell transplant patients.. Outpatient duties including pediatric hematology-oncology clinic and pediatric sickle cell clinic. 2006-*

Jackson Memorial Hospital Medical Staff; 2006-

*Attending physician in charge of caring for pediatric hematology-oncology patients and pediatric stem cell transplant patients. Specific duties include attending in the Holtz Children’s Hospital pediatric oncology, stem cell transplant service and pediatric hemophilia and sickle cell services*

Miami Children’s Hospital Medical Staff; 2012-

*Attending physician in charge of caring for pediatric stem cell transplant patients. Specific duties include attending in the pediatric outpatient and inpatient SCT services*

**ADMINISTRATIVE EXPERIENCE AND ACCOMPLISHEMENTS**

 Division Director; Pediatric Hematology-Oncology

Medical University of South Carolina. 2002-2006

* *Expanded clinical program in pediatric hematology-oncology and BMT. Consolidated pediatric BMT with adult BMT and became only referral BMT center in South Carolina.*
* *Expanded research infrastructure and output by increasing the number of federally funded research programs in the Division.*
* *Recruited physician scientists that have gone on to successful funded career in biomedical research.*
* *Led philanthropy efforts for the Division.*
* *Secured philanthropic support for the pediatric leukemia laboratory through the yearly Monica Kreber Golf Classic (organized by a grateful parent of one o my patients; ran successfully for 10 years until my departure from MUSC).*

Hollings Cancer Center, Medical University of South Carolina. 2004-2006.

* + - *Led the pediatric cancer program efforts in the cancer center and integrated pediatrics to the matrix structure of the center.*
		- *Implemented initiatives for the pediatric cancer program at Hollings Cancer center that were instrumental in the center obtaining NCI designation in 2007.*

 Division Director; Pediatric Hematology-Oncology

Director, Children’s Cancer Programs at Sylvester Cancer Center

University of Miami Miller School of Medicine. 2006-

* *Implemented a complete restructuring of the Division. This has resulted in increasing by over 200% the number of new pediatric cancer diagnosed patients seen by the Division on a yearly basis.*
* *Developed pediatric SCT, including expansion of the program to Miami Children’s Hospital and a new state-of-the-art 7-bed unit at Holtz Children’s Hospital. These efforts are projected to increase the number of yearly pediatric allogeneic BMT cases from and average of 10 to approximately 50-60 cases per year (current year 30-35 cases).*
* *In addition, the productivity of the sickle cell and hemophilia program’s increased significantly during my tenure as Division Director.*
* *Supported efforts that resulted in continued consideration and participation of the pediatric sickle cell program in all national studies sponsored by NHLBI.*
* *Supported efforts that led to the hemophilia program development of the only 340B program in the State.*
* *Established the first two basic/translational research laboratories in the Division’s 30-year history.*
* *Integrated the academic, research and clinical activities of the division with the Department of Pediatrics and Sylvester Cancer Center*
* *Established the outpatient pediatric hematology-oncology clinic at the Sylvester Cancer Center after securing a two million dollar gift.*
* *Established the first pediatric phase I program at the University of Miami Miller School of Medicine, which remains as the only in the region. This program is a member of several major national and international consortia focused on early phase clinical trials for pediatric cancer patients.*
* *Successfully recruited a leader for the pediatric phase I program.*
* *Under my leadership we developed an ACGME accredited pediatric hematology-oncology fellowship at the University of Miami Miller School of Medicine.*
* *Expanded the pediatric SCT program, which currently operates at Holtz and Miami Children’s Hospital, resulting in this program becoming the leader in the region. Successfully recruited two fellowship trained pediatric SCT physicians.*
* *Initiated international outreach activities that have resulted in increased referrals of international patients.*
* *Negotiated a contract with the government of Peru to perform unrelated pediatric SCT in Miami.*
* *Developed a an outreach program supported by Sylvester Cancer Center and the UM IMI to support the development of a pediatric SCT program in Peru by the Peruvian Ministry of Health.*
* *Early efforts are under way to develop a second international outreach program in Retinoblastoma with investigators at Bascom Palmer Eye Institute, Argentina and Spain. This effort will include collaborations around common clinical trials and translational research.*
* *The pediatric cancer program was listed for the first time in 2011 in US News & World report as one of the top 50 programs in the U.S.*

**PROFESSIONAL SOCIETY MEMBERSHIPS:**

 Fellow, American Academy of Pediatrics; 1987-

 American Association for Cancer Research; 1990-

*Accepted as a member of the society immediately after completion of fellowship training based on publication record in the field of cancer research and scientific contributions.*

 American Society of Clinical Oncology; 1988-

 American Society of Hematology; 1988-

 American Society of Pediatric Hematology-Oncology; 1991

 *Currently Chair of the society’s Membership Committee.*

 American Society for Blood and Marrow Transplantation, 1999-

 American Medical Association

 American Association for the Advancement of Science

 Children’s Oncology Group 2002-

*I have participated in several leadership positions, including being a member of the Voting Body Steering Committee (current). In addition, I am currently Vice-Chair of the International Affairs Committee and member of the ALL Scientific Committee. In the past contributed as a member of several protocol development committees and as chair of two successive national clinical trials for children with extramedullary relapse of ALL.*

 Society for Neuro-Oncology

 South Carolina Medical Association

 Southern Medical Association

 Charleston Medical Society

 College of Physicians and Surgeons of Peru

 Peruvian Society of Oncology (Corresponding Member)

*Current role as and advisor to the Instituto Nacional de Enfermedades Neoplasicas (equivalent to the NCI) in matters related to pediatric oncology and bone marrow transplantation. In addition as a participant as faculty for the national meetings of the society*

 Peruvian Society of Allergy and Immunology

**HONORARY SOCIETY MEMBERSHIP:**

 Peruvian Society of Immunology and Allergy

 Peruvian Society of Clinical Oncology

**OTHER ACADEMIC AND ADMINISTRATIVE ACTIVITIES & COMMITTEE MEMBERSHIPS:**

 MUSC Blood Usage Committee. 1991-1999.

 MUSC Hollings Cancer Center Experimental Therapeutics Group. 1994-2006

*Only pediatric oncologist member of the group. Participated in the leadership of the group and in promoting and conducting translational research.*

 MUSC Pediatric Neuro-Oncology Group. 1995-2006

*I developed and led the efforts of this multidisciplinary program which included paticipants from the Department’s of Neurosurgery, Radiation Oncology, Neurology, among others*

 MUSC Pharmacy and Therapeutics Committee. Ad Hoc Member. 1996-2006

 MUSC Hollings Cancer Center Protocol Review Committee. 2000-2006

 MUSC HCC Experimental Therapeutics Steering Committee. 2000-2006

*Co-led this effort for six years and set the foundation in this area for a subsequent successful P30 application which was attained after I had relocated to the University of Miami*

 MUSC Hollings Cancer Center Leukemia and Lymphoma Translational Research Group. Co-Leader 2001-2003.

*Developed this research group and co-led these efforts with Daniel Fernandes, Ph.D.*

 MUSC Hollings Cancer Center Scientific Advisory Committee 2003-

 MUSC Children's Hospital Quality Assurance Committee. 1995-2000-2006.

 MUSC Cancer Program Committee. 1993-1999.

 MUSC University Research Council. 2004-2006

*This committee was charged with advising the Provost and the Dean about the development and scientific direction of institutional research initiatives.*

 MUSC Hollings Cancer Center ACS Grant Review Committee. 2004-2006

 UM Department of Pediatrics Executive Committee. 2006-

 UM Department of Pediatrics Associate Chairs Committee. 2006-

*Charged with advising the Department Chair in administrative, clinical, educational and research matters*

 UM Sylvester Comprehensive Cancer Center Scientific Steering Committee. 2006-

*Charged with advising the Cancer Center Director in scientific and research initiatives undertaken in the center*

 UM SCCC Clinical Trials- Phase I-II Group. 2006-

 Program in Biomedical Sciences, Course Module Co-Director

 2009-

 UM Graduate Programs in Biomedical Sciences, Cancer Biology Program, Faculty, 2008-

**TEACHING ACTIVITIES:**

 Lecturer, MUSC Pediatric Core Course for Medical Students

 Lecturer, Biochemistry for Medical Students

 Preceptor, MUSC Parallel Curriculum

*Participated as a preceptor several groups of medical students in a non-traditional curriculum that exposes students to clinical scenarios beginning in the first year of medical school. The program pairs a medical doctor with a Ph.D. scientist*

 Preceptor, Laboratory Post-Doctoral Research Fellow and Graduate Students

 Tutor, Small Group Problem-based Learning Discussion. MUSC Parallel Curriculum

 Colloquia in Translational Research. UM SCCC Cancer Biology Graduate Program

 PIBS Molecular Therapeutics Course Module. University of Miami Miller School of Medicine

 CAB BOMB Course – Hypoxia and Metabolism Module. University of Miami Miller School of Medicine

**GRADUATE SCHOOL THESIS COMMITTEES AND MENTORSHIP:**

 Charles Hill, MD, PhD Doctoral Thesis Committee Member.

1996.

*Dr. Hill is currently an Associate Professor of Pathology and Laboratory Medicine at Emory University School of Medicine. He is the director of the Molecular Diagnostics Laboratory and Director of residency Programs. My role as a member of his committee was not only to advise him in the development of his thesis but also in assisting with the development of experimental strategies to address his thesis hypotheses*

 Yi Huang, PhD Doctoral Thesis Committee Member,

2000.

 Ibrahim Abdel-Rahman, MD Doctoral Thesis Committee Member,

2002.

*Dr. Abdel-Rahman is currently a member of the faculty at St. jude Children’s Research Hospital.*

 Ramandeep Rattan, PhD Doctoral Thesis Committee Member, 2004.

*Following her Ph.D. degree Dr. Rattan was awarded a Program of Excellence Grant in 2006 at Mayo Clinic.*

 Ratna Prasad, PhD Doctoral Thesis Committee Member,

2004.

 Wendy Ward, PhD Doctoral Thesis Committee Member, 2008

 Haibin XI Doctoral Thesis Committee Member

 2009

*Dr. Xi is currently pursuing post-doctoral training at the UCLA School of Medicine. As part of his graduate student work, my laboratory assisted Dr. Xi in the implementation of molecular techniques used in his thesis work*

 Jeffim Kuznetsov PhD and Doctoral Thesis Mentor

 2008

*Dr. Kuznetsov is currently pursuing post-doctoral training at the University of Miami School of Medicine Bascom Plamer Eye Institute*

 Annalise Smith Doctoral Thesis Committee Member

 2011

 Meghan Rice Doctoral Thesis Committee Member

 2011

Shushua Zheng PhD and Doctoral Thesis

Mr. Zheng has recently joined my laboratory as a PhD student through The Sheila and David Fuente Graduate Program in Cancer Biology.

**MENTORSHIP - CLINICAL FELLOWS:**

 Usman Yusuf, MD. Fellow Pediatric Hematolgoy-Oncology.

*I mentored Dr. Yusuf during his fellowship training in pediatric hematology-oncology which resulted in two peer-reviewed publications. Following his fellowship he pursued a fellowship in SCT at the Fred Hutchinson Cancer Center and then joined the faculty as and Associate Member at St Jude Children’s Research Hospital.*

 Jacqueline Kraveka DO. . Fellow Pediatric Hematolgoy-Oncology.

*I mentored Dr. Kraveka during her fellowship training in pediatric hematology-oncology her current position is as Associate Professor of Pediatrics. Medical University of South Carolina. She established a translational laboratory program in neuroblastoma.*

 Cristina Fernandes, MD. . Fellow Pediatric Hematolgoy-Oncology.

*Dr. Fernandes performed translational research in my laboratory focusing on the role of MRP, LRP and MDR in childhood ALL. She conducted a study in clinical samples of patients with T-ALL which was presented at ASCO. Her current position is of Assistant Professor of Pediatrics. Jackson Memorial, University of Miami School of Medicine. She leads the institutional program in retinoblastoma.*

 Teresa York, MD. Fellow Pediatric Hematology-Oncology.

*Dr. York trained in my laboratory and her project was centered on the transcriptional regulation of the gene tha encodes for Folyl-polyglutamate synthetase in childhood ALL. She is currently an Associate Professor of Pediatrics at the University of Maryland, and the COG Principal Investigator for that institution.*

Prakash Satwani, MD Fellow Pediatric Hematology-Oncology.

*Dr. Satwani is now Associate Professor of Pediatrics at Columbia University. He is an accomplished pediatric transplant physician and his research has contributed to the field of stem cell transplantation.*

Iyad Sultan, MD. Fellow Pediatric Hematology-Oncology.

*I was Dr Sultan’s clinical mentor during his training at MUSC. At the completion of his training he return to his native Jordan and developed the solid tumor program at the King Hussein Cancer Center. He is currently the Chairman of Pediatrics at the King Hussein Cancer Center in Amman. Jordan.*

 Lisa Johnson, MD. Fellow Pediatric Hematology-Oncology.

*Current Position: Nevada Cancer Research Foundation*

Peter Hosein, MD. Fellow Medical Oncology

 *Current Position: Instructor, Department of Medicine*

 *Hematology-Oncology*

 *University of Miami Miller School of Medicine*

 Yolanda Cosme, MD. Fellow Pediatric Hematology-Oncology

*Dr. Cosme joined my laboratory as a second year fellow. Her research project centers on the role of BCR-ABL in influencing oligosaccharide synthesis and the unfolded protein response in childhood ALL. Current Position: Second year fellow: UM/JMH Fellowship Program.*

**EXTRAMURAL COMMITTEES AND APPOINTMENTS:**

 Pediatric Oncology Group New ALL Reference Laboratory Directors Committee. 1994-2000

*My research laboratory was a reference laboratory for POG 9404, an NCI-sponsored therapeutic study for children with T-ALL. Our role was the analysis in clinical samples of patients enrolled on this trial of the enzyme that polyglutamates and activates the anti-leukemia drug methotrexate (FPGS).*

 Pediatric Oncology Group Lymphoid Relapse Biology Committee. 1995-2000

NIH-NCI Task Force for Protocol Development in Isolated CNS Relapse for ALL. POG/CCG Fusion Group. 1999-2001.

Member, NIH Study Section ET1 and Ad Hoc reviewer, 1998-200

Children’s Oncology Group ALL Disease Committee. 2000-

*I have participated in this committee for over 15 years, initially as a member of the Pediatric Oncology Group and currently in COG. As a committee member I participate in the development of new treatment strategies and protocols for children with ALL.*

 Consultant and Visiting Professor. Bone Marrow Transplant Unit, Hospital E. Rebagliatti, Universidad Nacional Mayor de San Marcos, Peru. 1993-

*I have been a consultant for this program since it was created. Unitl recently, it was the only pediatric and adult bone marrow trasnpalnt program in Peru. My role consists in providing technical advice. I also provided training to medical personnel who currently work in that program.*

 Children’s Oncology Group Extramedullary Relapse of ALL Protocol Development Committee. 2000-

*I led the development and chaired protocol AALL02P2 for the treatment of these patients. The objectives of this study were to reduce cranial radiation to children with isolated CNS relapse and to eliminate testicular radiation for boys with isolated testicular relapse of ALL.*

 Children’s Oncology Group T-ALL Relapse Biology Strategy Group. 2000-2002

 Children’s Oncology Group New ALL Committee. Pharmacology Liason. 2000-2002

 Children’s Oncology Group. Protocol Compliance Auditor. 2001-2004

*I performed compliance audits assessing adherence to NCI sponsored clinical studies conducted byt the collaborative group. I also performed these functions for the legacy group Pediatric Oncology Group.*

 Member, NIH Study Section ZCA1 SRRB-3-J1 R, Exploratory/Developmental Grants: Overcoming barriers to early phase clinical trial. 2002-

 Member, COG Voting Body Steering Committee. 2004-

*Elected for two consecutive terms to serve on this administrative committee that represents the Principal Investigators of the group*

 Member, COG Membership Task Force. 2005-2008

 Member, COG Latin America Committee. 2006-

 Chair, American Society of Pediatric Hematology-Oncology (ASPHO) Membership Committee. 2012-

*As chair of this committee I have led efforts to successfully increase participation and membership in the society. I have also spearheaded initiatives to increase international membership. Among the new initiatives are the Best of ASPHO meetings in Latin America, the first of which will take place in the Fall of 2014 in Uruguay.*

 Consultant. Ministry of Health of Peru. National Pediatric Cancer and BMT Program. 2012-

**INTERNATIONAL ACADEMIC & OUTREACH ACTIVITIES**

Consultant, Bone Marrow Transplant Service, Hospital Edgardo Rebagliatti – Esalud. Lima, Peru. 1995-

As consultant I led the efforts in the establishment of the first stem cell transplant unit in Peru. My contibutions included assistance with the technical aspects of development of the actual SCT unit and program, including training of physicians who rotated through the Medical University of South Carolina. The unit has performed over 1000 transplants since it was established.

 Member, COG International Committee. 2000-

 As a member of the COG international committee, I have advised

Pediatric oncologists in Latin America in the development of multi-national cooperative groups that conduct clinical trials in pediatric cancer. I was instrumental in the establishment of the only pediatric oncology cooperative group in South America Grupo Latinoamericano de Oncologia Pediatrica (GALOP). These activities continue and I attend all GALOP meetings and provide consultative support.

AdHoc Consultant, Instituto Nacional de Enfermedades Neoplasicas (INEN). Lima, Peru. 1995-

For approximately two decades I have assisted in the development of therapies for children with cancer and consulted on difficult cases.

Consultant, Peruvian Ministry of Health – Plan Esperanza. Lima, Peru. 2010-

My role in this project is to assist the Peruvian government in the establishment of a pediatric stem cell transplant unit in the flagship national children’s hospital in Lima. Together with technical assistance, I lead a University of Miami effort to train physicians and ancillary staff in performing alternative donor and cord blood transplants. To date we have organized training courses in Lima, consult on a regular basis on the management of patients undergoing sibling donor transplants in Lima, and children requiring alternative donor or cord bblod transpalnts are referred to us at University of Miami for that purpose. Once fully implemented, the national pediatric stem cell transplant program in Peru will have the capabilities of perfromin all types of setm cell transplants on site.

**COMMUNITY-RELATED AND ADVOCACY ACTIVITIES**

Happy Days and Special Times, Inc.

*Non-profit charitable group for children with cancer in Charleston, SC. Member of the Board of Directors, 2005-2006.*

 St Baldrick’s Foundation

*Participation in fundraising activities for this foundation that supports childhood cancer treatment and research. Among other activities I participate in events that take palce in local high schools in South Florida.*

CureSearch

*Participation in yearly walks aimed at raising funds in support of childhood cancer.*

Cancer FreeKids Foundation

 Dolphin Cycling Challenge

*Participation for the last two years in this partnership between the Miami Dolphins and the UM Sylvester Cancer Center. This is a yearly 170 mile ride that raises funds in support of the cancer center*

**RESEARCH INTERESTS:**

 Childhood Acute Lymphoblastic Leukemia

 Tumor metabolism

 Experimental Therapeutics

**EXTRAMURAL CLINICAL AND BASIC RESEARCH ACTIVITIES:**

Director, Pediatric Oncology Group National Reference Laboratory for Pharmacology Studies (Folylpolyglutamate Synthetase Studies); POG 9400 Studies for Childhood ALL. 1994-2005.

Co-Principal Investigator, POG 9061; Treatment of Isolated e of Acute Lymphoblastic Leukemia - A POG Group-wide Phase II Study. 1995-1999.

*This study demonstrated that chemotherapy with drugs that penetrate the CNS allows for a six month delay in CNS radiation and increased intensity of systemic chemotherapy leading to improved cure rates for these patients.*

Chairman and Principal Investigator, POG 9412; Treatment of Isolated CNS Relapse of Acute Lymphoblastic Leukemia - A POG Group-wide Phase II Study. 1995-

*My role was to design and conduct this national study within the COG. We demonstrated that using intensive systemic chemotherapy with drugs that penetrate the CNS, it was feasible to reduce the dose of cranial radiation patients with isolated CNS relapse of ALL. The results of this study represent to date the best reported outcome for patients with isolated CNS relapse of ALL, and therefore are considered the standard of care of rhis group of patients. These landmark results were presented at ASCO and published in the Journal of Clinical Oncology.*

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Principal Investigator, Children’s Oncology Group. MUSC Institutional PI. 2000-2006

Chairman and Principal Investigator, COG AALL02P2 Treatment of Isolated CNS Relapse of Acute Lymphoblastic Leukemia - A COG Group-wide Phase II-III Study. 2002-

*My role was to design and conduct this national study within COG. The preliminary results of this study have been presented in the SIOP meeting. A major contribution arising from this trial is the demonstration that at least one third of patients with isolated testicular relapse can be cured without testicular radiation, therefore preservation of fertility in this group should be greatly increased.*

Principal Investigator, Children’s Oncology Group. University of Miami Miller School of Medicine. Institutional PI. 2006-

*Successful reorganization of the program at University of Miami to meet the requirements to maintain membership in this NCI supported cooperative group. Prior to these efforts and my tenure at University of Miami, the program was slated for termination as a COG member due to lack of enrollment onto clinical trials and failed regulatory and compliance audits. This included reorganization of the data management operations, comprehensive training of ancillary medical staff and institutional investigators participating in these trials.*

Principal Investigator, Treatment Advances for Childhood Leukemia (TACL) Phase I Consortium. 2007-2008

# Co-PI. NCT01324180 Trial of Vincristine, Dexamethasone, Doxorubicin, and PEG-asparaginase (VPLD) and Metformin for Relapsed Childhood Acute Lymphoblastic Leukemia (ALL)

*This is an investigator initiated clinical trial based on research conducted in my laboratory demonstrating the effectiveness of metformin in inducing apoptosis in ALL cell lines and primary cells from children with this disease.*

Co-PI. T2009-012 A Phase I Dose Finding Study of Panabinostat in Children with Refractory Hematological Malignancies.

*This is an investigator initiated trial sponsored by Novartis. The leukemia arm of the study is based on data from my research laboratory.*

**SCIENTIFIC REVIEWER/STUDY SECTION PARTICIPATION:**

Member, NCI ZCA1 SRRB-3. Exploratory/Developmental Grants. Overcoming barriers to early clinical trials.

 Ad Hoc Member, NCI Experimental Therapeutics 2 (ET2).Study Section

 American Cancer Society Research.

 HCC-DOD Translational Research Grants.

 Leukemia Lymphoma Society Career Development Program Grants.

Leukemia Lymphoma Society Quality of Life Program Grants

University of Miami CTSA K12 Grant Program

**AD-HOC REVIEWER:**

 Blood

Cancer Research

 Clinical Cancer Research

 Journal of Clinical Oncology

Leukemia

 Leukemia Research

 Molecular Pharmacology.

 Journal of Clinical Oncology

 Pediatric Hematology & Oncology

Pediatric Blood & Cancer

 Molecular Cancer Therapeutics

American Journal of Hematology.

 American Journal of Dermatology.

 Journal of Pediatric Hematology-Oncology.

 International Journal of Hematology

**EDITORIAL BOARDS**

 1. Journal of Experimental Pharmacology

2. Clinical Pharmacology: Advances and Applications

 3. Patient Related Outcome Measures

 4. The Open Leukemia Journal

5. CELLR4

**PHILANTROPY**

Medical University of South Carolina:

* Monica Kreber Golf Classic – Yearly event to raise funds in support of leukemia research in the Darby Children’s Research Institute. Totla funds raised: $ 750,000

University of Miami Miller School of Medicine:

* Raised over 2.0 million dollars for the UM Sylvester Cancer Center Pediatric Cancer Program and the Department of Pediatrics to build a brand new pediatric hematology-oncology and BMT outpatient clinic inaugurated in May 2012. A portion of this gift is also allocated to research in pediatric cancer
* Partnered with the Miami Dolphins to secure a commitment for 3.5 million dollars from funds raised by the Dolphin Cycling Challenge in support of pediatric cancer at Sylvester Cancer Center. To date, approximately 1.0 million dollars have been designated for this purpose.
* Secured several other gifts ranging from $25 to $75 thousand form various other individuals and philanthropic sources.

**INVITED PRESENTATIONS:**

1 Title: "Successful Treatment of Unresectable Hepatoblastoma in Children". Isaac Walton Killam Hospital for Children/Dalhousie University. Halifax, Nova Scotia. Canada. June, 1989.

2 Title: "Novel Microassay for Folylpolyglutamate Synthetase: Basic and Clinical Research Applications". Vanderbilt University. Nashville, Tennessee. December, 1989.

3 Title: "Folylpolyglutamate Synthetase and its Relevance to Cancer Chemotherapy". Medical University of South Carolina. Charleston, South Carolina. March, 1990.

4 Title: "Modulation of Folylpolyglutamate Synthetase (FPGS) activity during Growth and Development". Children's Hospital of Los Angeles/University of Southern California. Los Angeles, California. September, 1990.

5 Title: "Folylpolyglutamate Synthetase (FPGS) dependency on Proliferation and Differentiation". Kenneth Norris Jr. Comprehensive Cancer Center/University of Southern California. Los Angeles, California. December, 1990.

6 Title: "Immune Mediated Thrombocytopenias". South Carolina Medical Association/American Academy of Pediatrics. Charleston, South Carolina. May 1992.

7 Title: "Bone Marrow Transplantation in Pediatrics". Instituto Nacional de Enfermedades Neoplasicas. Peruvian National Cancer Institute. Lima, Peru. August, 1992.

*Invited as a keynote speaker to the national oncology meeting. Spend time as visiting professor.*

8 Title: "Polyglutamation, an Essential Step in Antifolate Cytotoxicity". St. Jude Children's Research Hospital. Memphis, Tennessee. November, 1992.

9 Guest Speaker. VI Latin American and VII Peruvian Meeting of Allergy and Immunology. Lima, Peru. December, 1992.

 *Keynote speaker.*

10 Title: "Constitutive and Post-Methotrexate Folylpolyglutamate Synthetase Activity in childhood Acute Leukemias". Children's Hospital of Los Angeles/University of Southern California. Los Angeles, California. July, 1993.

11 VI Latin American and VII Peruvian Meeting of Allergy and Immunology. Lima, Peru. December, 1992.

12 XII Meeting Peruvian Society of Clinical Oncology. October, 1992

13 IX Meeting, Peruvian Society of Allergy and Immunology. July, 1995.

14 Guest Speaker. XIII Meeting Peruvian Society of Clinical Oncology. October, 1993.

 *Keynote speaker*

15 Guest Speaker. IX Meeting, Peruvian Society of Allergy and Immunology. July, 1995.

16 Title: Phenotype Targeted Chemotherapy for Childhood Acute Lymphoblastic Leukemia. State University of New York at Stony Brook. Stony Brook, NY. March, 1996.

17 Title: “New Perspectives in the Treatment of Childhood Acute Leukemia”. Instituto Nacional de Enfermedades Neoplasicas. Peruvian National Cancer Institute. Lima, Peru. December, 1996.

18 Title: “Cord Blood Stem Cell Transplantation”. Unidad de Transplantes de Medula Osea, Hospital E. Rebagliatti. Universidad Nacional Mayor de San Marcos. Lima, Peru. December, 1997.

*In addition to lecturing, I conducted a review of the program intended to assess its capability at the time and assist in outlining future initiatives for further development of the center.*

19 Title: “A Blast is a Blast. Novel Approaches to Treating Childhood Leukemias” Allegheny University School of Medicine. Pittsburgh, PA. June, 1998.

20 Title: “Expression of FPGS in Childhood Leukemias; Therapeutic Implications”. College of Physicians and Surgeons, Columbia University. New York, NY. September, 1999.

21 Title: “New Strategies in the Treatment of Childhood ALL”. Baystate Medical Center/Tufts University School of Medicine. Springfield, MA. March 2000.

22 Title: “Childhood Leukemia: From Bench to Clinic to Bench”. MUSC - Dept of Pediatrics, Grand Rounds. April, 2000.

23 Title: “Lineage-specific MTX Polyglutamation; Therapeutic Implications in the Treatment of Childhood ALL” St Jude Children’s Research Hospital. Memphis, TN. July, 2000.

24 Title: “Mechanisms of Resistance to Methotrexate”. Symposium: The Rational Use of Methotrexate. Children’s Oncology Group National Fall Meeting. Phoenix, AZ. October, 2000.

*One of three keynote speakers in an educational symposium organized by the COG Hematology-Oncology discipline committee.*

25 Title: “Expression of FPGS in Acute Leukemia”. University of Maryland. Baltimore, MD. April, 2001.

26 Title: “Head and Neck Masses in Children and Adolescents”. Department of ENT Grand Rounds. Medical University of South Carolina. Charleston, SC. November, 2001.

27 Title: “Darbepoitein Alfa, Clinical Trials in Oncology”. MUSC Site Investigator’s Meeting. Charleston, SC. May 2002.

28 Title: “Transcriptional Control of the FPGS Gene in Childhood Leukemias”. CHLA. Los Angeles, CA, September, 2002.

29 Title: “Molecular determinants of MTX Metabolism in Childhood ALL”. Emory University. Atlanta, GA. September 2003.

30 Title: “Childhood ALL; New Translational Research Paradigms”. Massey Cancer Center, Virginia Commonwealth Univieristy/MCV. Richmond, VA. December 2003.

31 Title: Chidlhood Acute Lymphoblastic Leukemia: Novel Translationsl Pardigm” MUSC Pediatric Grand Rounds. Charleston, SC December 2003.

32 Third Annual Pediatric Hematology-Oncology Symposium. AFLAC Cancer Center. Emory University. Atlanta, GA. September 2003.

33 University of Mississipi Children’s Hospital. Jackson, MS. January 2005.

34 Medical College of Georgia. Augusta, GA. March 2005.

35 American University of Beirut, Lebanon. Pediatric Cancer Center. October 2005

36 Bone Marrow Transplantation Unit. Hospital Edgardo Rebagliatti. Lima, Peru. November 2005.

37 Instituto de Enfermedades Neoplasicas. Pediatric Oncology Unit. December 2006.

38 Title: Childhood ALL; a Clinical and Scientific Update. Peruvian Society of Hematology. Lima, Peru. June 2004.

39 Title: “Transcriptional Control of the FPGS Gene in Childhood Leukemias”. University of Arizona Cancer Center. Tucson AZ. June 2005.

40 Title: “Recent Advances in ALL Biology” Middle East Oncology Congress. Beirut, Lebanon. October 2005.

41 Title: “Approaches to relapsed acute lymphoblastic leukemia”. Middle East Oncology Congress. Beirut, Lebanon. October 2005

42 Title: Chidlhood Acute Lymphoblastic Leukemia: Advances in Diagnosis and Therapy. Insituto de Enfermedades Neoplasicas. UNMSM. Lima, Peru. November 2005.

43 Title: Childhood Acute Lymphoblastic Leukemia: a Paradigm for Molecular Medicine. UM Pediatric Grand Rounds. November 2006.

44 Title: New Treatment Paradigms in Childhood Cancer. Instituto Nacional de Enfermedades Neoplasicas. Lima, Peru. December 2006

45 Title: Childhood Acute Lymphoblastic Leukemia: Advances in Biology and Treatment. Miami Children’s Hospital. April 2007.

46 Title: Advances in SCT for Acute Lymphoblastic Leukemia. Hospital Edgardo Rebagliatti. Lima, Peru. December 2007

47 Title: Novel Treatment Strategies for relapsed Extramedullary Relapse of ALL. City of Hope, Duarte, CA. September 2007.

48 Title: Advances in Treatment Strategies for Adolescents and Young Adults with ALL. MUSC Hollings Cancer Center. Charleston, SC April 2008

*Guest Faculty/Visiting Professorship*

49 Hospital Edgardo Rebagliatti. Servicio de Transplantes de Medula Osea. Lima, Peru. October 18-24, 2008

*Guest Faculty/Visiting Professorship.*

50 Title: Hematopoietic Stem Cell Transplantation. Instituto Nacional de Enfermedades Neoplasicas. Lima, Peru. October 2008

51 Title: Advances in Molecular Therapy for ALL. Sociedad Peruana de Hematologia. Lima, Peru. October 2008

52 Title: Simultaneous Interruption of Metabolic Pathways in Childhood ALL. Chemotherapy Foundation Symposium. New York NY. November 2008

 *Symposium Faculty*

53 Title: Advances in Molecular Targeted Therapy for Acute Lymphoblastic leukemia. King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia. August 2009.

 *Visiting Professorship*

54 Title: Advances in the Treatment of Adolescents and Young Adults with ALL. COMO 8 Middle-Eastern Oncology Congress. Beirut, Lebanon. November 2009

*Meeting Faculty*

55 Title: Treatment Approaches to Relapsed Acute Lymphoblastic Leukemia. COMO 8 Middle-Eastern Oncology Congress. Beirut, Lebanon. November 2009

*Meeting Faculty*

56 Title: Targeting AMPK Metabolic and Oncogenic Pathways in ALL.

Sydney Children’s Hospital. Sydney, Australia. October 2011

 *Visiting Professorship*

57 Title: Leukemia & Lymphoma – CNS Involvement. 3th Simposio de Leucemia, Linfoma, Mieloma y Trasplante de Medula Osea. Hospital Universitario. Universidad de Puerto Rico. PR. December 2011

*Keynote Speaker*

58. GALOP Meeting – Emerging Strategies in Bone Transplantation in Children. Buenos Aires, Argentina. June 2012

 *Guest Speaker*

59. Title: Advances in Stem cEll Transplantation for the Treatment of Childhood Leukemias. Peruvian Misnistry of Health &Instituto Nacional de Enfermedades Neoplasicas. Symposium of Sem Cell Transplant. Lima, Peru.

May 2013.

*Guest Speaker*

60. Hematopoietic Stem Cell Transplantation Training Course for Physicians and Helath Care Professionals. Peruvian Ministry of Health – Plan Esperanza. Lima, Peru. September, 2013.

 *Course Director and Organizer*

**VISITING PROFESSORSHIPS:**

1. Hospital Edgardo Rebagliatti. Unidad de Transplantes de Medula Osea. Lima, Peru. June 1995.
2. Instituto Nacional de Enfermedades Neoplasicas. Ministerio de Salud. Lima Peru. October 1998
3. Departamento de Onco-Hematologia. Hospital Edgardo Rebagliatti. EsSalud. Lima, Peru. October 2008.
4. Children’s Cancer Center of Lebanon. American University of Beirut. Beirut, Lebanon, November 2009.
5. Departamento de Onco-Hematologia. Hospital Edgardo Rebagliatti. EsSalud. Lima, Peru. June 2009.
6. Visiting Professorship: King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia. August 2009.

7 Guest Faculty/Visiting Professorship. Hospital Edgardo Rebagliatti. Servicio de Transplantes de Medula Osea. Lima, Peru. December, 2010

8 Title: Simultaneous Interruption of Metabolic Pathways in Childhood ALL. Children’s Hospital of Michigan. March 2010.

9 Visiting Professorship: Instituto Nacional de Enfermedades Neoplasicas. Lima Peru. August 2010.

10 Visiting Professorship: Instituto Nacional de Enfermedades Neoplasicas. Lima Peru. June 2011.

11 Visiting Professorship: Sydney Children’s Hospital.

Sydney, Australia.. October 2011

12 Visiting Professorship: Universidad de Puerto Rico.

San Juan, PR. December 2011

13 Hospital Pediatrico Garrahan. Fundacion Garrahan

Buenos Aires, Argentina. June 2012

14 GALOP (Grupo de America Latina de Oncologia Pediatrica) Meeting

Buenos Aires, Argentina. June 2012

15 GALOP (Grupo de America Latina de Oncologia Pediatrica) Meeting Montevideo, Uruguay. March 2013

**PEER-REVIEWED PUBLICATIONS:**

1 JC Barredo. Eye diseases in children. Journal of the Peruvian Ministry of Health 3: 15-19, 1982.

2 B Antonson, JC Barredo, RG Moran. A Microassay for Mammalian Folylpolyglutamate Synthetase. Analytical Biochemistry 186, 8-13; 1990.

*This manuscript describes the development of an assay for the enzyme responsible for metabolizing methotrexate and other antifolates into their pharmacologically active metabolites. These metabolites are the ones responsible for the cytotoxic effects in tumor cells. My role was to develop a crude assay initially designed by Bruno Antonsson into a microassay that could measure enzymatic activity using microliter volumes of sample making it feasible to use for the analysis of clinical samples. To date it is the only microassay available for this enzymatic activity and allowed us to subsequently validate the role of this enzyme as determinenant of methotrexate polyglutamate accumulation in ALL blasts as a predictor of clinical sensitivity to this drug. Based on the work described in this manuscript and I was granted a waiver by the US State Department on the basis of outstanding research performed in the best interest of the US in order to take a faculty position at the Medical University of South Carolina.*

3 NA Lanchant, CR Zerez, JC Barredo, DW Lee, SM Savely, KR Tanaka. Hereditary Erythrocyte Adenylate Kinase Deficiency: a Defect of Multiple Phosphotransferases? Blood 77 (12), 2774-2784; 1991.

*This represents the first report describing this red cell enzymatic deficiency as responsible for severe hemolytic anemia.*

4 JH Laver, Fushen Xu, JC Barredo, MR Abboud. Studies on the Effects of Radiation and 4-Hydroperoxycyclophosphamide on the Production of G- and GM-CSF by Stromal Cells. Bone Marrow Transplantation 10, 529-533; 1992.

5 JC Barredo, RG Moran. Determinants of Antifolate Cytotoxicity: Folylpolyglutamate Synthetase Activity During Cellular Proliferation and Development. Molecular Pharmacology 42, 687-694; 1992.

*This manuscript described for the first time that the regulation of the catalytic activity of the enzyme FPGS is regulated by two distinct mechanisms, one that is tissue-specific and the second which is linked to cellular proliferation and differentiation. My role in this manuscript was to design and conduct all experimental aspects of the same under the mentorship of Dr. Moran.*

6 EC Taylor, D Kuhnt, C Shih, SM Rinzel, GB Grindey, JC Barredo, M Jannatipour, RG Moran. A Dideazatetrahydrofolate Analogue Lacking a Chiral Center At C-6, N-{4-{2-Amino-4 (3H)-oxo-7H-pyrrolo{2, 3-d}pyridin-5yl)ethyl}-L-glutamic Acid, is an Inhibitor of Thymidylate Synthase. Journal of Medicinal Chemistry 35, 4450-4454; 1992.

*This is the first report describing the biochemistry and cellular pharmacology pemetrexed (Alimta®). My role was to conduct all the cellular experiments that identified thymidylate synthase as one of the main targets of pemetrexed, and to uncover that this drug was indeed a multi-targeted antifolate. Pemetrexed has been FDA approved for the treatment of mesothelioma.*

7 M Abboud, S Jackson, JC Barredo, J Beatty, J Laver. Bone Marrow Transplantation for Sickle Cell Anemia. American Journal of Peds Hem/Onc. 16 (1), 86-89; 1994.

8 JC Barredo, TW Synold, J Laver, C - H Pui, DG Priest, WE Evans. Differences in Constitutive and Post-Methotrexate Folylpolyglutamate Synthetase Activity in B-Lineage and T-Lineage Leukemia. Blood 84 (2), 564-569; 1994.

*This manuscript together with a companion manuscript published in the Journal of Clinical Oncology established for the first time the pre-clinical and clinical basis for the differential metabolism of the antifolate methotrexate in children with B-lineage and T-lineage ALL. We found that due to differences in the expression of the enzyme that determines the accumulation of methotrexate polyglutamates, FPGS. As a result, the Pediatric Oncology Group subsequently conducted a trial using high-dose methotrexate in T-ALL that resulted in a 20% increase in cure rates in children with T-ALL (POG 9404). My role was to conduct all of the correlative biological studies and pre-clinical studies to demonstrate the lineage-specific differences in FPGS. This study was possible based on the development of the microassay described in reference # 2.*

9 JR Priest, J Watterson, L Strong, V Huff, WG Woods, RG Byrd, SH Friend, I Newsham, MD Amylon, A Pappo, DH Mahoney, C Langston, R Heyn, G Kohut, DR Freyer, B Bostrom, MS Richardson, JC Barredo, LP Dehner. Pleuropulmonary Blastoma: A Marker for Familial Disease. J Pediatr 128 (2), 220-224, 1996.

10 TW Synold, E Willits, JC Barredo. The Role of FPGS in Antileukemic Therapy. Leukemia and Lymphoma 21, 9-15; 1996.

11 MR Abboud, SM Jackson, JC Barredo, K Holden, J Cure, J Laver. Neurologic complications following bone marrow transplantation for sickle cell disease. Bone Marrow Transplantation. 17(3), 405-407; 1996.

12 JC Barredo, U Yusuf, MR Abboud, J Laver. Progressive Chronic Graft vs Host Disease Induced by Cyclosporine A. Bone Marrow Transplantation Bone Marrow Transplantation. 18(3), 659-662;1996.

*My role was as the primary physician who identified the emergence and conducted studies to proof the development of chronic GVHD following autologous BMT. In addition my role was as the mentor to Dr. Yusuf who subsequently went on to a successful academic career in pediatric bone marrow transplantation.*

13 LA Foster, MR Abboud, AB Taylor, JC Barredo, J Laver, J Lazarchik. Myelodysplasia Associated with Turner's Syndrome. American Journal of Pediatr Hem/Onc. 18(3), 299-301; 1996.

14 J Laver, U Yusuf, ES Cantu, JC Barredo, LB Holt, MR Abboud. Transient therapy-related myelodysplastic syndrome associated with monosomy 7 and 11q23 translocation. Leukemia. 11(3) 448-450; 1997.

*This represents one of the initial reports associating specific chromosomal aberrations found in myelodysplasia secondary to chemotherapy in a patient with Ewing’s sarcoma.*

15 AJ Galpin, JD Schuetz, E Masson, Y Yanishevski TW Synold, JC Barredo, C-H Pui, D Campana, MV Relling, WE Evans. Differences in Folylpolyglutamate Synthetase and Dihydrofolate Reductase Expression in B-lineage versus T-lineage Acute Lymphoblastic Leukemia: Mechanisms for Lineage differences in methotrexate Polyglutamylation and Cytotoxicity. Molecular Pharmacology. 52: 155-163; 1997.

16 JC Barredo, M Abboud, J Laver. Successful Treatment of Relapsed Infant Acute Lymphoblastic Leukemia with Intensive Antimetabolite-based Chemotherapy. Med Pediatr Oncol. 29(4), 256-259; 1997.

17 JD Rowley, S Reshmi, O Sobulu, T Musvee, J Anastasi, S Raimondi, NR Schenider, JC Barredo, ES Cantu, B Schlegerberger, F Behm, NA Doggett, J Borrow, N Zelenik-Le. All Patients With the (11;16)(q23;p13.3) That Involves MLL and CBP Have Treatment-Related Hematologic Disorders. Blood. 90(2): 535-541; 1997.

18 U Yusuf, D Dufour, J Jenrette, MR Abboud, J Laver, JC Barredo. Survival with Combined Modality Therapy after Intracerebral Recurrence of Pleuropulmonary Blastoma. Med Pediatr Oncol. 30(1): 63-66; 1998.

*My role in this publication was as the mentor to Dr. Yusuf who subsequently went on to a successful academic career in pediatric bone marrow transplantation.*

19 Y Liu, K Raghunathan, C Hill, Y He, MA Bunni, JC Barredo, DG Priest. Effects of Folylpolyglutamate Synthetase Antisense Down-Regulation on Reduced Folates and Cellular Proliferation in CCRF-CEM Cells. Biochem Pharmacol 55(12): 2031-2037; 1998.

20 N Burt, RC Roy, ST Reeves, PF Rust, MR Abboud, JC Barredo, JH Laver. Postdural Puncture Headaches in Pediatric Oncology Patients. Canadian Journal of Anaesthesia 45(8): 741-745; 1998.

21 B Ogretmen, JC Barredo, HR Bahadori, AR Safa. Overexpression of LRP and MRP in Childhood Pre-B Acute Lymphoblastic Leukemia (ALL). J. Pediatr Hematol Oncol 22(1): 45-49, 2000.

22 AK Ritchey, BH Pollock, SJ Lauer, Y Andejeski, J Barredo, GR Buchanan. Improved Survival of Children with Isolated CNS Relapse of Acute Lymphoblastic Leukemia. A Pediatric Oncology Group Study. J Clin Oncol 17(12): 3745-3752; 1999.

*This represents the first clinical trial to demonstrate significant improvement in cure rate for patients with isolated CNS relapse of ALL. This trial used what at the time was a novel design that delayed CNS directed radiation therapy for six months allowing intensified systemic chemotherapy with effective drugs that crossed the blood brain barrier. My role in this study included input in the study design and conduction of the same.*

23 JH Laver, JC Barredo, M Amylon, M Schwenn, J Kurtzberg, BM Camitta, J Pullen, M Link, M Borowitz, J Shuster. Effects of Cranial Radiation in Children with High Risk T-Cell Acute Lymphoblastic Leukemia: A Pediatric Oncology Group Report. Leukemia 14: 369-373; 2000.

24 GJ Leclerc, JC Barredo. Expression of Folylpolyglutamate Synthetase Gene mRNA Splice Variants and Protein in Primary Human Leukemia Cells, Cell Lines, and Normal Human Tissues. Clinical Cancer Research 7: 942-951, 2001.

*This manuscript described for the first time the differential expression of splice variants of the enzyme FPGS in human normal tissues and primary leukemia cells. Further, it confirmed our previous body of work that indicated the expression of the gene encoding for this enzyme is tissue-specific and in the case of the lymphohematopoietic system, lineage-specific. My role in this project was as the laboratory PI responsible for postulating the hypotheses tested, for the experimental design and interpretation of the data.*

25 JH Laver, TC Hulsey, JP Jones, M Gautreaux, JC Barredo, MR Abboud. Assessment of Barriers to Bone Marrow Donation by Unrelated African-American Potential Donors. Biology of Blood & Marrow Transplantation 7: 45-58, 2001.

26 Leclerc GJ, Leclerc GM, Barredo JC. Real-Time RT-PCR analysis of mRNA decay: half-life of Beta-actin mRNA in human leukemia CCRF-CEM and Nalm-6 cells. Cancer Cell International 2:1-5, 2002

27 The STOP 2 Trial Investigators. Discontinuing Prophylactic Transfusions Used to Prevent Stroke in Sickle Cell Disease. NEJM, 353(26): 2769-2778, 2005.

*My role in this project was as institutional investigator. This is one fo the seminal trials conducted in children with sickle cell disease leading to the elucidation of the role of transfusions in preventing strokes. The results of this trial established the accepted current management for this patient population.*

28 Shayla Bergmann; Deyi Zheng; Julio Barredo; Miguel R. Abboud; Ayad A. Jaffa Renal Kallikrein: A Risk Marker for Nephropathy in Children With Sickle Cell Disease. Journal of Pediatric Hematology/Oncology. Volume 28, Issue 3, 147-153, 2006.

29 Julio C. Barredo, Stephen Lauer, Amy Billet, MaryAnne Marymount, Meenakshi Devidas, Bruce Camitta, Naomi Winick, William Carroll, A. Kim Ritchey. Isolated CNS Relapse Of Acute Lymphoblastic Leukemia (All) Treated With Intensive Systemic Chemotherapy And Delayed CNS Radiation: A Pediatric Oncology Group Study. J Clinical Oncology. Jul 1;24(19):3142-9, 2006.

*This national clinical trial established efficacy of reduced dose CNS radiation for patients with late extramedullary relapse. It represents the best published results to date for this group of patients and established the current standard of care for children with isolated CNS relapse. My role was as study chair, providing significant input into the study design and responsible for data analysis and interpretation.*

30 Terry A Day MD, Ricardo A Beas MD, Rodney J Schlosser MD, Bradford A Woodworth MD, Julio Barredo MD, Anand K Sharma MD and MBoyd Gillespie MD FACS. Management of Paranasal Sinus Malignancy. Current Treatment Options in Oncology, 6:3-18, 2005.

31 Leclerc GJ, York TA, Kinser T, Barredo JC. Molecular basis for decreased folylpoly-γ-glutamate synthetase expression in a methotrexate resistant CCRF-CEM mutant cell line. Leukemia Research 31(3): 293, 2007.

*My role in this project was as the senior investigator and mentor to Dr. Teresa York who currently directs the pediatric hematology-oncologuy program at the University of Maryland. This manuscript describes one of the mechanisms of acquired resistance to methotrexate.*

32 Guy Leclerc and Julio Barredo. Analysis of folylpoly-gamma-glutamate synthetase gene expression in human B-precursor *ALL* and T-lineage ALL cells**.** BMC Cancer. May 17;6:132, 2006.

33 Gillespie MB, Marshall, DT, Day AT, Mitchell AO, White DR, Barredo JC. Pediatric Rhabdomyosarcoma of the Head and Neck. Current Opinions in Oncology 7: 13-22, 2006.

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Meeting, December 2009).

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52 Leclerc G.M., Leclerc G.J., Kuznetsov J.N., and Barredo J.C. (2012) PIM2 is up-regulated in response to metformin-induced cell death triggered by ER stress/UPR in ALL lymphoblasts. Presented at 13th Annual Zubrod Memorial Lecture and Sylvester Comprehensive Cancer Center Poster Session, Miami, FL, 2012

53 Leclerc G.J., Du J., DeSalvo J., Leclerc G.M., and Barredo J.C. The BCR-ABL fusion protein sensitizes acute lymphoblastic leukemia to apoptotic death induced by the dual glycolytic and glycosylation Inhibitor 2-deoxy-D-glucose. Presented at the 54th Annual Meeting and Exposition of the American Society of Hematology, Atlanta, GA, December 2012

54 Leclerc G.J., Du J., Leclerc G.M., DeSalvo J., Lampidis T.J., Barredo J.C. The BCR-ABL fusion protein sensitizes acute lymphoblastic leukemia to apoptotic death induced by the dual glycolytic and glycosylation inhibitor 2-deoxy-d-glucose. Presented at the 2013 Miami Winter Symposium: The Molecular Basis of Metabolism and Nutrition, Miami, FL, February 2013

55 Leclerc G.M., Leclerc G.J., Kuznetsov J.N., DeSalvo J., Barredo J.C. Metformin induces apoptosis through AMPK-dependent inhibition of UPR signaling in ALL lymphoblasts. Presented at the 2013 Miami Winter Symposium: The Molecular Basis of Metabolism and Nutrition, Miami, FL, February 2013

56 Julio C. Barredo, Caroline Hastings, Xiaomin Lu, Robert Marcus, Naomi Winick, Meenakshi Devidas, James Whitlock, A. Kim Ritchey, Stephen Hunger, William Carroll. Isolated testicular relapse of all successfully treated with intensive systemic chemotherapy and without testicular radiation: a children’s oncology group study. SIOP Meeting. 2013

57 Gilles M. Leclerc1, John Goldberg1,3, and Julio C. Barredo. Metformin induces apoptosis through ampk-dependent inhibition of upr signaling in all lymphoblasts. SIOP Meeting. 2013

58. Gilles M. Leclerc, Ph.D., Shuhua Zheng, B.Sc., Ronan T. Swords, M.D., Ph.D., Guy J. Leclerc, Ph.D., and Julio C. Barredo, M.D.The NEDD8 Conjugation Pathway Inhibitor MLN4924 Activates AMPK and Induces the ER stress/UPR-Mediated Cell Death Pathway in Acute Lymphoblastic Leukemia. ASH Meeting, New Orleans. December 2013.

59. Guy J. Leclerc, Joanna DeSalvo1, Yolanda Cosme, Gilles M. Leclerc, Theodore J. Lampidis, and Julio C BarredoER stressors sensitize BCR-ABL+ Bp-ALL cells to tyrosine kinase inhibitors via AMPK-dependent downregulation of Mcl-1 expression. AACR Meeting. April 2014.

**ONGOING INVESTIGATOR INITIATED CLINICAL TRIALS:**

1 NCT01324180. Vincristine, Dexamethasone, Doxorubicin, and PEG-asparaginase (VPLD) and Metformin for Relapsed Childhood Acute Lymphoblastic Leukemia (ALL). Phase I clinical trial using metformin in ALL based.

*This trial is based on pre-clinical data generated entirely by the Barredo laboratory.*

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2 T2009-012 A Phase I Dose Finding Study Of Panobinostat In Children With Refractory Hematologic Malignancies.

*Supported by Novartis, based on data from the Barredo lab and Novartis investigators.*

**GRANT SUPPORT:**

**ACTIVE:**

1 Principal Investigator – University of Miami Miller School of Medicine. U10-CA98543-01 Children’s Oncology Group. Subcontract, National Children’s Cancer Foundation. NIH. 8-1-2006-to date. 10% Salary support

2 COG Chair Grant: Treatment of Isolated Extramedulary Relapse of ALL. Children’s Oncology Group. 1-1-05 to 12-31-15. 5% Salary Support.

3 Micah Batchelor Award for excellence in Pediatric Research. $250,000. 2008-

4 Targeting Glucose Metabolism in BCR-ABL positive acute lymphoblastic leukemia (ALL). Women’s Cancer Association of the University of Miami (WCA). 07/01/12-07/31/15

5 UM Acute Lymphoblastic Leukemia Research Laboratory. Dolphin Cycling Challenge. $3,500,000. 2013-

**PENDING:**

1. Dual PI-Grant. PIs: Julio Barredo MD and Theodore Lampidis PhD. Exploiting the metabolic vulnerabilities of BCR-ABL positive ALL. NCI.

2. PI. Julio Barredo, MD. Targetting the NEDD8 Conjugation Pathway in Childhood Acute Lymphoblastic Leukemia. NCI

**PAST:**

1 PI. Role of Folylpolyglutamate Synthetase in Cancer Chemotherapy. Principal Investigator. McCallister Research Fellowship. Period: 07-01-88 to 06-30-90.

2 PI. Folylpolyglutamate Synthetase (FPGD) in Normal and Malignant Human Hematopoiesis. Medical University of South Carolina (MUSC) Research Council. Period: 10-01-92 to 09-31-93.

3 PI. "Folylpolyglutamate Synthetase (FPGS) Activity in Human Hematopoietic Cells and Leukemia". Source: Medical University ofSouth Carolina (MUSC) Research Council. Period: 11-01-94 to 10-31-96.

4 Co-Investigator. Jude Children's Research Hospital Leukemia Program Project Grant”. (PI: Dr. Williams E. Evans). Source: National Cancer Institute, NIH. Period: 10-01-93 to 09-30-96.

5 Co-PI. ”5-Fluorouracil Targets in Eucaryotic Cells". (PI: Dr. David G. Priest.) Source: National Cancer Institute, NIH; #2R01 22754. Period: 03-01-95 to 02-28-99.

6 PI. “Role of FPGS in Antileukemic Chemotherapy”. Source: The Children’s Fund. Period: 01-01-97 to 12-31-99.

7 Principal Investigator. "Development of MUSC Pediatric Neuro-Oncology Program". Source: The Children's Fund. Period: 02-01-97 to 01-31-00.

8 Principal Investigator: “Expression of FPGS Splice Variants in Childhood ALL” Jolley Foundation Grant. Period: 01-01-99 to 12-31-01

9 Principal Investigator. “Clinical Phenotype Targeted Antifolate Chemotherapy”. Source: National Cancer Institute, NIH; #CA72734. Period: 2-01-97 to 1-31-02.

10 Principal Investigator. “Carolina’s Pediatric Oncology Consortium”. Source: National Cancer Institute, NIH; U10 #CA69177. Period: 7-1-2000 to 12-31-02.

11 Principal Investigator. “Overexpression of Multidrug Resistance Protein and Lung Resistance Protein in Childhood ALL. Source: Pediatric Oncology Group. Period: 6-1-010 to 12-31-02.

12 Principal Investigator. “Transcriptional Regulation of FPGS in Human Leukemias. Source: US Department of Defense. Period: 2-1-01 to 1-31-03.

13 Co-Principal Investigator: “Molecular Determinants of Drug Resistance”. Source: US Department of Defense. Period: 06-01-01 to 12-31-03.

14 Institutional Principal Investigator. SOAR – Succesful Outcomes in Anemia Research Trial. Source: Amgen. 8-01-00-.

15 Institutional Principal Investigator. A Phase II Randomized Non-Comparative Trial of Irinotecan and Carboplatin vs. Irinotecan in Subjects 1-21 Years of Age with Refractory Solid Tumors. Source: Bristol Myers Squibb CA124-002.

16 Co-Principal Investigator: A Phase I Trial Of Gamma/Delta T Cell Enriched Donor Leukocyte Infusions In Patients At Risk For Leukemia Relapse After Allogeneic Bone Marrow Transplantation. Leukemia & Lymphoma Society of America Translational research Grant. 9-01-02 to 8-31-04.

17 Co-Investigator: “Correlates of MTX Sensitivity in Childhood ALL”. PI: Larry Matherly, PhD. NCI-NIH. 2-01-03 to 1-31-06. 5% Salary Support

18 Activation of AMPK: Implications for targeted Therapy. Supported by Monica Kreber Golf Classic.

19 Principal Investigator - MUSC. U10-CA98543-01 Children’s Oncology Group. Subcontract, National Children’s Cancer Foundation. NIH. 2003-2006. 10% Salary support

20 Principal Investigator - MUSC. “Baby-Hug” National Heart, Lung & Blood Institute. NIH 2002-2006. 10% Salary Suppport.

21 Principal Investigator - MUSC. Stroke With Transfusions Changing to Hydroxyurea (SWITCH): A Phase III randomized clinical trial to compare standard therapy (erythrocyte transfusions with iron chelation) with alternative therapy (hydroxyurea with phlebotomy) for the prevention of secondary stroke and the management of iron overload in pediatric subjects with sickle cell anemia and previous stroke. Source: National Heart, Lung & Blood Institute. NIH 1-1-06. 10% Salary Support

22 Principal Investigator: Julio Barredo, MD Multi-Drug Resistance Gene Expression In Wilms Tumors: Correlation With Outcome.Supported by COG (AREN03B3).

23 Simultaneous Interruption of Signal Transduction Pathways in the AMPK and PI3K/Akt/mTOR Pathways. Supported by Women’s Cancer Association of the University of Miami (WCA). $50,000. 2007

24 Potentiation of Antileukemia Efficacy of Antifolates by Histone deacetylase Inhbitors. Supported by Women’s Cancer Association of the University of Miami (WCA). $50,000. 2008

25 Potentiation of Antileukemia Efficacy of Antifolates by Histone deacetylase Inhbitors. Supported by Women’s Cancer Association of the University of Miami (WCA). $50,000. 2008

26 Simultaneous Interruption of Signal Transduction Pathways in the AMPK and PI3K/Akt/mTOR Pathways. Supported by Women’s Cancer Association of the University of Miami (WCA). $50,000. 2007

27 Potentiation of Antileukemia Efficacy of Antifolates by Histone deacetylase Inhbitors. Supported by Women’s Cancer Association of the University of Miami (WCA). $50,000. 2008

28 Co-Principal Investigators: Julio Barredo, MD and Steven Grant, MD. Simultaneous Interruption of Cell Cycle and Signal Transduction Pathways in Childhood ALL. Supported by COG (AALL05B2).

29 Simultaneous Targeting of Tumor Metabolic Networks and Glycolysis in ALL. STOP Children’s Cancer. $120,000 2008-2009

30 Principal Investigator – University of Miami Miller School of Medicine. “Baby-Hug” National Heart, Lung & Blood Institute. NIH 8-1-2006-2010 10% Salary Suppport.

31 Principal Investigator: 1-R01-CA098152 “Molecular Determinants of MTX Metabolism in ALL”. NCI-NIH, 04-01-04 to 03-31-11; Award $1,825,000. 30% Salary Support.

32 PO1 Pilot Project: Targeting Glycolysis and Glycosylation to Improve Treatmetn Efficacy in Various Tumor Types. Sub-project: Simultaneous Targeting of Tumor Metabolic Networks in ALL. UM SCCC Development Grant. $80,000. 2008-2011.

33 Principal Investigator. Leukemia & Lymphoma Society Translational Research Program Grant: “Simultaneous Interruption of Tumor Metabolic Pathways for ALL Therapy” . LLS 10-1-08 to 12-10-12. 8% Salary Support

34 Targeting Glycolysis and the AMPK Regulated Metabolic Networks in Childhood Acute Lymphoblastic Leukemia (ALL). CancerFree Kids $20,000 05/01/11-04/30/12

35 Co-targeting AMPK-induced ER stress/unfolded protein response (UPR) and protein degradation in Acute Lymphoblastic Leukemia (ALL). Women’s Cancer Association of the University of Miami (WCA). $50,000. 06/01/11-05/31/12

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