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**EDUCATION:**

- 1995-1994 Pediatric Orthopaedics and Scoliosis Fellowship  
Texas Scottish Rite Hospital for Children, Dallas, Texas.
- 1994-1990 Orthopaedic Surgery Residency  
University District Hospital and V.A. Hospital  
Chief Senior Resident and Research's Award  
San Juan, Puerto Rico.
- 1990-1989 Orthopaedic Research Position  
University District Hospital  
University Pediatric Hospital, San Juan, Puerto Rico.
- 1989-1988 General Surgery Internship (PGY-1)  
University District Hospital and V.A. Hospital  
San Juan, Puerto Rico.
- 1988-1984 Doctor of Medicine  
Senior Class President  
University of Puerto Rico, School of Medicine.
- 1984-1981 Pre- Medicine  
University of Puerto Rico, Mayagüez, Campus.  
Dean's List 1982-1984  
Tri-Beta Honor Society Vice President.  
Phi-Eta- Mu Social Fraternity

**CERTIFICATIONS:**

- 1- Diplomate of the National Board of Medical Examiners NBME NO. 365834 (1992).
- 2- Orthopaedic Board. Certified (1997). Recertification ( 2006) Recertification ( 2017)
- 3- Licensure: Puerto Rico 11340 (1993).

**EDUCATIONAL POSITION:**

1. Orthopaedic Department, Shriners Children Hospital Philadelphia. 2005 - Present
2. Orthopaedic Department, University of Puerto Rico: 2000- Present
3. Ponce School of Medicine. General Surgery Department: 2002- Present
4. Mayagüez Medical Center. General Surgery Department 1995-2002
5. Mayaguez Medical Center. Pediatric Department 1995-2001
6. Mayaguez Medical Center. Graduated Medical Education Office Director 2009-Present
7. Manati Medical Center Graduated Medical Education Office Director 2013-Present

**JOURNAL EDITOR**

1. arsMedicina
2. Revista Puertorriquena de Medicina y Salud Publica

**SOCIETY MEMBERSHIP:**

American Academy of Orthopaedic Surgeons. Fellow

American Academy of Pediatrics. Fellow

Pediatric Orthopaedic Society of North America. Member.  
Committee For Orthopedics in Underserved Regions ( COUR)

Scoliosis Research Society

Chest Wall and Spine Deformity Study Group

Puerto Rico Orthopaedic Society. President 2000-2001  
Vice-President 1999-2000  
Secretary-Treasurer 1998-1999  
Board of Director 2003-2004

Sociedad Dominicana de Ortopedia y Traumatología. Member.

Sociedad Mexicana de Ortopedia Pediátrica. Member.

Sociedad Paraguaya de Ortopedia y Traumatología. Member

Sociedad LatinoAmericana de Ortopedia y Traumatología Infantil. Founder Member

Asociacion Peruana de Ortopedia y Traumatologia Infantil. Member

Sociedad de Ortopedia y Traumatologia Del Uruguay. Member

Sociedad Chilena de Ortopedia y Traumatologia. Member

Sociedad Colombiana de Ortopedia y Traumatologia. Member

## PUBLICATIONS:

### Abstracts

**Slipped Capital Femoral Epiphysis in the Hispanic Population.** Rafael Fernández-Feliberti, M.D. ,**Norman Ramírez, M.D.**, and José Díaz, M.D. Orthopedic Transactions. Vol. 17, 1993.

**The Outcome of Open Tibial Shaft Fractures in Diabetes Mellitus Patients.** John Flynn, M.D., **Norman Ramírez, M.D.**, Luis Sánchez, M.D., Geraldo Pérez, M.D., Antonio De La Cruz, B.S., and Francisco Díaz, B.S. Orthopaedic Transactions Vol. 18, 1994. Page 950.

**Posterior Spinal Fusion in Duchenne Muscular Dystrophy-Risks versus Benefits.** **Norman Ramírez, M.D.**, Paul Warren, M.D., Geoge R. Williams, M.D., and B. Stephens Richards, M.D. Orthopaedic Transactions. Vol. 20 Number 2, 1996. Pages 327.

**Natural History of Jarcho-Levin Syndrome.** Alberto Santiago Cornier, M.D., **Norman Ramírez, M.D.**, Sandra Arroyo, M.D., Armando Márquez, M.D., José Acevedo, R.S., and M. Warman. The American Journal of Human Genetics. Vol. 67 -S ,Number 4, October, 2000.

**Natural History of Spondylothoracic Dysplasia.** Alberto Santiago Cornier, M.D., **Norman Ramírez, M.D.**, Sandra Arroyo, M.D., Armando Márquez, M.D., José Acevedo, R.S., and M. Warman. European Journal of Human Genetics. May, 2001.

**Mapping of Spondylothoracic Dysplasia (Jarcho- Levin Syndrome) to Chromosome 2q32.1 in Puerto Rican population .** A . Santiago- Cornier, **N. Ramirez, V.** Franceschini, J.Acevedo, H.Roman, E.Rosado, L Garcia, J.Torres . The American Journal of Human Genetics. Vol 69-S, Number 4 October 2001, pag 514

**Assessing Coping Strategies in families with Jarcho-Levin Syndrome.** J. Acevedo, N. Ramirez, A. S Cornier. The American Journal of Human Genetics Vol. 71-S, Number 4. October 2002 pag 346

**Preste atención al dolor de espalda en los niños.** Norman Ramirez. Press, Primera Hora. 27 de Febrero del 2003 Suplemento pag.2

**Description of the Pulmonary Function Tests in 13 Spondylothoracic Dysplasia Patients.** A Cornier, AA Reis, JM Massanet , JR Acevedo, S Carlo,V Franceschini, H Rivera, N. Ramirez. The American Journal of Human Genetics Vol. 73-S: 295. 2003

**Comparison of Height and Thoracic Circumference Measurements of 20 Spondylothoracic Dysplasia patients .** J Massanet, S Carlo, N Ramirez, A Reis H Rivera, J Acevedo, V Franceschini, A Cornier. The American Journal Of Human Genetics Vol 73-S: 262. 2003

**Sequential Pulmonary Function Test in 5 Spondylothoracic Dysplasia Patients**  
**N Ramirez,** J Acevedo, S. Carlo,J Massanet, A Reis, H Rivera, V Franceschini  
A S Cornier. The American Journal of Human Genetics. Vol 73-S:264. 2003

**Differences of Anthropomorphic Measurements in the Survival probability of 20 patients with Spondylothoracic Dysplasia.** A Reis, J Massanet, S Carlo, N Ramirez, V. Franceschihi, J Acevedo , AS Cornier .The American Journal of Human Genetics. Vol 73-S:263. 2003

**Presence of Lactic Acidemia and elevated Lactic-Pyruvate Ratio in patients with Autism.** S Carlo, N Arcinegas, D Valencia, J Acevedo,H Rivera, A Reis J Massanet ,N Ramirez, AS Cornier. The American Journal of Human Genetics. Vol 73-S:445. 2003

**Escoliosis Idiopática.** Norman Ramirez. Revista Buena Vida Junio 2004

**The use of S-Hook as Pelvic Foundation as Part of Rib Base Construct**  
**Norman Ramírez,** John Flynn, John Smith, Michael Vitale, Charles D' Amato and Ron El- Hawary. J Child Orthop :4; 481.2010

**Spasticity is a risk factor of complications and surgical outcome in the management of early onset neuromuscular scoliosis with a rib-based growing system.** Norman Ramirez-Lluch MD, Gerardo Olivella MPH ; Omar Rodriguez BS ; Pablo Marrero MD ; John Smith MD ; Sumeet Garg MD ; Michael Vitale MD ; Randal Betz MD ; Children Spine Study Group. Spine Deformity Journal 2017 ;

**Classification of Early Onset Scoliosis (C-EOS) and Pulmonary Function Outcomes**  
Klane White, Bompadre Viviana , Norman Ramirez , Shing Varakitsomboon ,Sumeet Garg Gregory Redding , Walter Krenge. Spine Deformity Journal 2017 ;

**Journal:**

**Transfer of the Anterior Tibialis for Calcaneus Deformity in Myelodysplasia.** Rafael Fernández-Feliberti, M.D., Samuel Fernández, M.D., Carlos Colón, M.D., **Norman Ramírez, M.D.**, Margarita Alegría, Ph.D., and Kenneth Cintrón, B.S. The Journal of Bone and Joint Surgery. Vol. 74A, 1992. Pages 1038-1041.

**Slipped Capital Femoral Epiphysis in a Hispanic Population From 1980-1990**  
Nestor Ramos, Rafael Fernandez, Pablo Marrero, **Norman Ramirez**, Jose Diaz  
Bol. Asoc. Med P.R. ;84:97-101. 1992

**Effectiveness of TLSO Bracing in the Conservative Treatment of Idiopathic Scoliosis.**  
Rafael Fernández-Feliberti, M.D., John Flynn, M.D., **Norman Ramírez, M.D.**, Mark Trautmant M.D., and Margarita Alegría, Ph.D. Journal of Pediatric Orthopaedics. Vol. 15, 1995. Pages 176-181.

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Randall Loder, M.D., **Norman Ramírez, M.D.**, and 46 co investigators. Clinical Orthopaedics and Related Research. Vol. 322, 1996. Pages 28-36.

**The Demographics of Slipped Capital Femoral Epiphysis: An International Multicenter Study.** Randall Loder, M.D., Norman Ramírez, M.D., and 46 co investigators. Clinical Orthopaedics and Related Research. Vol. 322. Pages 8-27.

**Complications After Posterior Spinal Fusion in Duchenne's Muscular Dystrophy.**  
**Norman Ramírez, M.D.**, B. Stephens Richards, M.D., Paul Warren, M.D., and George R. Williams. Journal of Pediatric Orthopaedics. Vol. 17, 1997. Pages 109-114.

**The Prevalence of Back Pain in Children Who Have Idiopathic Scoliosis.** **Norman Ramírez, M.D.**, Charles E. Johnston, M.D., and Richard H. Browne, Ph.D. Journal of Joint and Bone Surgery. Vol. 79A, March, 1997. Pages 364-368.

**Back Pain During Orthotic Treatment of Idiopathic Scoliosis.** **Norman Ramírez, M.D.**, Charles Johnston II, M.D., Richard Browne, Ph.D., and Sonia Vázquez, R.N. Journal of Pediatric Orthopaedic. Vol. 19, March, 1999. Pages 198-201.

**Distal Third Fibular Aneurysmal Bone Cyst: En Bloc Resection and Proximal Third Fibular Reconstruction.** **Norman Ramírez, M.D.**, Carlos Pérez, M.D., and Yamil C. Rivera. M.S. The American Journal of Orthopedics. Vol. 30 Number 3, March 2001. Page 237.

**Musculoskeletal Trauma in Four-Wheeled All-Terrain Vehicles.** Luis A. Rios – Reboyras MD, Jorge E. Grovis MD, **Norman Ramirez MD**, Charles Zierenberg MD, Antonio Otero MD, Fernando E.Vilella MD. Orthopedics Vol.25, Number 10 page 1079 October 2002

**Osteogenesis Imperfecta and Hyperplastic Callus Formation in a Family: a report of three cases and a review of the literature.** Norman Ramirez , Fernando Vilella ,Mirylsa Colon and John Flynn. Journal of Pediatric Orthopaedics- B.Vol 12 pag 88-96. 2002

**Results of Shoulder Arthroplasty in Nontraumatic Conditions: Third-Generation Prothesis Experience .** Rafael Seneriz, Efrain Deliz, Javier Delgado, Fernando Vilella and Norman Ramirez. Techniques in Shoulder and Elbow Surgery 4(3):133-138. 2003

**The Controversies Surrounding Jarcho-Levin Syndrome.** AS Cornier, N. Ramirez, S Carlo, A Reis. Current Opinions of Pediatrics. Vol 15-6: 614 -620.2003

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**Phenotype Characterization and Natural History of Spondylothoracic Dysplasia Syndrome: A series of 27 new cases.** As Cornier, N. Ramirez, S. Arroyo, J. Acevedo, L. Garcia, S. Carlo and B. Korf. American Journal of Medical Genetic 2004 July 15; 128A(2) : 120-126

**Clubfoot Release in Myelodysplasia.** J. Flynn, J. Herrera-Soto, N. Ramirez R. Fernandez-Feliberti, F. Vilella, J. Guzman Journal of Pediatric Orthopaedics B Vol 13(4) : 259-262

**Floating Knee Injuries Treated with Single-Incision Technique versus Traditional Antegrade Femur Fixation: A Comparative Study.** J Rios, V. Ho-Fung, N Ramirez, R. Hernandez . The American Journal of Orthopaedics. 2004 September Vol XXXIII Pag 468-472

**The Musculoskeletal Manifestation of the Coffy – Lowry Syndrome**  
J. Herrera-Soto , A. Santiago, L Segal, N Ramirez, J. Tamai. Journal Pediatric Orthopaedic Vol 27(1) ; 2007 :pag 85-89

**Unilateral Congenital Absence of the Calf Muscle.** John Flynn, Norman Ramirez, Alberto S. Cornier, Edgard Colon – Negron. Journal of Pediatric Orthopaedics B Vol 16(1) 2007 pag 70-72 .

**Bone Tissue Reaction to Ti-48Al-2Cr -2Nb (at.%) in a Rodent Model: A Preliminary SEM Study.** D Castaneda- P Sumdaram , N Ramirez Journal of Material Science: Materials in Medicine 2007 July 18 pag 1433-1438

**Knee pain and Leg Length Discrepancy after Retrograde Femoral Nailing**  
R.Reina, F Villella, N Ramirez, R Valenzuela, G Nieves, C Foy. Am J Ortop 2007 June 36 (6) pag 325-328

**Skeletal Dysplasia : A Jarcho- Levin Syndrome Perspective** AS Cornier MD, PhD , **N Ramirez MD**, S Carlo MD. Revista Puertorriquena de Medicina Y Salud Publica 2007 Volumen III pag 14-20

**The Natural History of Thoracic Insufficiency Thoracic Syndrome: A Spondylothoracic Dysplasia Perspective** Norman Ramírez, Alberto S. Cornier, Robert M. Campbell, Jr., Simón Carlo, Sandra Arroyo and Jesse Romeu *J Bone Joint Surg Am.* 2007;89:2663-2675.

**Mutations in the MESP 2 Gene Cause Spondylothoracic Dystosis/ Jarcho-Levin Syndrome.** Alberto S Cornier , Karen Staehling-Hampton, Kym Deenthal Yumiko Saga, Jean –Francois Caubet, Nobuo Sasaki, Sian Ellard, Elizabeth Young, **Norman Ramírez**, Simon E. Carlo, Jose Torres, John B. Emans, Peter D. Turnpenny, Oliver Pourquie. The American Society of Human Genetics. 15 May 2008

**Pediatric Back Pain.** **Norman Ramirez** , John Flynn Revista Puertorriquena de Medicina y Salud Publica Pag 24-30 Vol. XII –II- 2008

**The Experience at La Concepcion Hospital With the Management of Early Onset Scoliosis.** Jose Serrano BS, **Norman Ramirez MD**, John Flynn MD, Laura Aviles MD, Ernesto Jusino MD, Heriberto Sanchez MD, Simon Carlo MD, Alberto Santiago Cornier MD- PhD. Revista Puertorriquena de Medicina y Salud Publica Pag 12-19 Vol. XIII –III- 2009

**Five New Mutations in FBN1 Gene Causing Marfan Syndrome in Puerto Rican Population .** Simon Carlo, Norma Arciniega, **Norman Ramírez** , John Flynn, Alberto Santiago Cornier Revista Puertorriqueña de Medicina y Salud Publica Pag 20-23 Vol. XIII –III- 2009

**Mortality and life-threatening events after Vertical Expandable Prosthetic Titanium Rib in Children wiyh Hypoplastic Chest wall Deformity** Betz RR, Mulcahey MJ, **Ramirez N**, Flynn JM, Smith JT, St Hilaire T, Campbell RM. Journal Pediatric Orthopaedics. 2008 Dec; 28(8):850-3.

**The Vertical Expandable Prosthetic Titanium Rib in the of spinal deformity due to progressive early onset scoliosis** **Ramírez N**, Flynn JM, Serrano JA, Carlo S, Cornier AS. J Pediatric Orthop B. 2009 Jul; 18(4):197-203.

**Increased Hemoglobin Levels in Patients With Early Onset Scoliosis: Prevalence and Effect of a Treatment with Vertical Expandable Prosthetic Titanium Rib (VEPTR)** Caubet, Jean-Francois MD; Emans, John B. MD; Smith, John T. MD; vanBosse, Harold MD; **Ramirez, Norman MD**; Flynn, John MD; Vitale, Michael MD; Smith, Melissa RN; St. Hilaire, Tricia BS; Klinge, Steve BA Spine 2009; 34 number 23 pag: 2534-2536

**Steel Syndrome: Dislocated Hips and Radial Heads, Carpal Coalition, Scoliosis, Short Stature and Characteristic Facial Features.** J. Flynn MD, N. Ramírez MD, R. Betz MD, M.J. Mulcahey PhD, F. Pino MD, J.A. Herrera MD, S. Carlo MD, A. Cornier MD PhD  
Journal Pediatrics Orthopaedics 2010;30:282-288

**Vertical Expandable Prosthetic Titanium Rib as Treatment of Thoracic Insufficiency Syndrome in Spondylocostal Dysplasia.** Norman Ramírez, John Flynn, John Emans, Randal Betz, John Smith, Nigel Price, Tricia St. Hilaire, Ajeya P. Joshi and Robert Campbell. Journal Pediatrics Orthopaedics 2010;30: 521-526

**Is the Vertebral Expandable Prosthetic Titanium Rib a Surgical Alternative in Patients with Spina Bifida?** John Flynn, Norman Ramírez, John Emans, John Smith, MJ Mulcahey, Randal Betz . Clin Orthop Relat Res 2011; 469(5) 1291-1296

**Clinical and radiological distinction between Spondylothoracic Dysostosis ( Lavy-Moseley Syndrome) and Spondylocostal Dysostosis ( Jarcho-Levin Syndrome )** Walter Berdon, Brooke Lampl, Alberto S Cornier, Norman Ramírez, Peter Turpenny, Michael Vitale , Leonard Seimon, Robert Cowles. Pediatr Radiol 2011; 41(3):384-388.

**Variability of expert opinion in treatment of early-onset scoliosis.** Vitale MG, Gomez J, Matsumoto H, Roye D, Betz RR, Campbell R, Emans J, Flynn M, Flynn M, Ramirez-Lluch N, Snyder B, Sturm P, Song K, Smith J, Shift JS Clin Orthop Related Res 2011;469:1317-1322

**Orthosis noncompliance after the Ponseti Method for the treatment of idiopathic clubfeet : a relevant problem that need reevaluation.** Norman Ramírez, John Flynn, Samuel Fernandez, Wallace Seda, Raul Machiavelli , Journal Pediatrics Orthopaedics. 31: 2011: 710-715.

**Musculoskeletal manifestations of neonatal Nonketotic Hyperglycinemia.** Ramirez N, Flynn J, Casalduc F, Rodriguez S, S. Cornier A, Carlo S. Journal of Children's Orthopaedics 2012;6:199-203

**Evaluation of a vancomycin dosing regimen for patients on high flux hemodialysis: an observational study.** Yazmín Soto Guerrero, Ricardo Hernández Castillo, Edgardo Santiago, Norman Ramírez Yuch, Francisco Jaume Anselmi, Rebeca Jové, Raúl Flores, Roberto Lebrón, José Ramírez Rivera Boletín de la Asociación Médica de Puerto Rico 104(3):10-14.

**Psychological dysfunction in children who require repetitive surgery for early onset scoliosis.** Flynn J, Matsumoto H, Torres F, **Ramirez N**, Vitale M. Journal Pediatrics Orthopaedics 2012;32:594-599

**Osteogenesis imperfect type V: marked phenotypic variability despite the presence of the IFITM5 c.-14C>T mutation in all patients.** Frank Rauch, Pierre Moffat, Peter Roughley, Liljana Lalic, Allan Lund, **Norman Ramirez**, Somayyeh Fahiminiya, Jacek Majewski, Francis Glorieux. Journal Medical Genetic 2013, 50:21-24

**The Efficacy of Rib-based Distraction With VEPTR in the Treatment of Early-Onset Scoliosis in Patients With Arthrogryposis.** Astur N, Flynn JM, Flynn JM, **Ramirez N**, Glotzbecker M, van Bosse HJ, Hoashi JS, d'Amato CR, Kelly DM, Warner WC Jr, Sawyer JR Journal Pediatric Orthopaedics 2014 Jan;34(1):8-13.

**Nuevos Cambios de Acreditación Para la Residencias Médicas.** Norman Ramírez MD FAAP/FAAOS , Milton Carrero MD FACP, Eliasim Muñoz MD DABFM , Vielka Cintrón MD DABFM , Krystal Hernández, Aracelis Nieves MD DABFM, Idalia Montalvo , Enid Gutiérrez, Neyda Soto, Lic. Jaime Maestre . Revista Salud Publica de Puerto Rico 2014

**Evaluation of a Systematic Approach to Pediatric Back Pain: The Utility of Magnetic Resonance Imaging .** Norman Ramirez, Flynn JM, Hill BW, Serrano JA, Calvo CE, Bredy R, Macchiavelli RE. Journal Pediatric Orthopedics 2015 January 15

**Use of the S-hook for Pelvic Fixation in Rib Based Treatment of Early Onset Scoliosis: A Multicenter Study.** Ramirez N, Flynn JM, Smith JT, Vitale M, Sturm P, D' Amato C, Samdani A, Machiavelli R, El-Hawary R. Spine June 2015

**Thoracic Insufficiency Syndrome:** An Overview. Norman Ramirez, Sigfredo Villarin, Robert Richies, Kenira Thompson . Razavi International Journal of Medicine (Iran) November 2015

**Reliability analysis of Cobb angle measurements of congenital scoliosis using X-ray and 3D-CT images.** Tauchi R, Tsuji T, Cahill PJ, Flynn JM, Flynn JM, Glotzbecker M, El-Hawary R, Heflin JA, Imagama S, Joshi AP, Nohara A, **Ramirez N**, Roye DP Jr, Saito T, Sawyer JR, Smith JT, Kawakami N. Eur J Orthop Surg Traumatol. 2015 Sep 16.

**One-step (standard) versus two-step surgical approach in adolescent idiopathic scoliosis posterior spinal fusion: Which is better? Norman Ramirez, Pablo Valentin, Manuel Garcia – Cartagena, Solais Samalot, Ivan Iriarte Eur J Orthop Surg Traumatol. 2016**

**Epidemiology of pediatric bone fractures across age groups: Analysis of a pediatric population at an outpatient clinic in the Southwest region of Puerto Rico.** Jose Ortiz-Fullana, Pablo Valentin , **Norman Ramirez.** Boletin Asociacion Medica de Puerto Rico 2016; 108: 51-58.

**Dolor de espalda pediatrico- Pediatric back pain.** **Norman Ramirez,** Pedro Rivera. Revista latinoamericana de Cirugia Ortopedica .Volumen 2, Núm. 7, Julio - Septiembre 2017

## **PRESENTATIONS**

**Slipped Capital Femoral Epiphysis in the Hispanic Population.** 26<sup>th</sup> Annual Resident's Conference. American Orthopaedic Association. March, 1993. Seattle, Washington.

**The Outcome of Open Tibial Shaft Fractures in Diabetes Mellitus Patients.** 27<sup>th</sup> Annual Resident's Conference. American Orthopaedic Association. March, 1994. Atlanta, Georgia.

**Effectiveness of TLSO Bracing in the Conservative Treatment of Idiopathic Scoliosis.** 14<sup>th</sup> F.L. Raffucci Memorial Lecture and Surgical Research Forum. February, 1994. San Juan Puerto Rico.

**Posterior Spinal Fusion Duchenne's Muscular Dystrophy: Risks versus Benefits.** 1995 Pediatric Orthopaedic Society of North America-International Meeting ( POSNA). May, 1995. Miami, Florida.

**Back Pain and Scoliosis.** 17<sup>th</sup> Brandon Carrell Visiting Professorship. June, 1995. Dallas, Texas.

**Complications in Duchenne's Muscular Dystrophy Spinal Fusion.** 17<sup>th</sup> Brandon Carrell Visiting Professorship. June, 1995. Dallas, Texas.

**Back Pain During Brace Treatment of Idiopathic Scoliosis.** 18<sup>th</sup> Brandon Carrell Visiting Professorship. June, 1996. Dallas, Texas.

**Dolor de Espalda Durante el Tratamiento de Escoliosis Idiopática con Abrazaderas.** X Congreso Internacional SMOP 1996. November 1996. Acapulco, Mexico.

**Historia Natural del Síndrome Jarcho-Levin.** XIV Congreso Anual Sociedad Mexicana de Ortopedas Pediatricos ( SMOP ). November, 2000. Guanajuato, Mexico.

**Natural History of Spondylothoracic Dysplasia.** Primer Foro Ortopédico. March, 2001. San Juan, Puerto Rico.

**Historia Natural del Síndrome Jarcho-Levin.** Sociedad Latinoamericana de Ortopedia y Traumología Infantil. May, 2001. Cancún, Mexico.

**Natural History of Spondylothoracic Dysplasia.** Pediatric Orthopaedic Society of North America ( POSNA). May, 2001. Cancún, Mexico.

**The Orthopedic Manifestations of Bardet- Biedl Syndrome.** XVI Congreso Anual Sociedad Mexicana de Ortopedia Pediatrica (SMOP ) November 2002 Puerto Vallarta , Mexico.

**The Orthopedics Manifestations of Bardet-Biedl Syndrome.** 25<sup>th</sup> Brandon – Carrell Visiting Professorship ( TSRH ). June 2003. Dallas , Texas

**Spondylothoracic Dysplasia: Patients with Thoracic Insufficiency Syndrome with an unexpected survival rate.** Pediatric Orthopaedic Society Meeting of North America Annual Meeting ( POSNA) , April 2004, St Louis, Missouri

**Dysplasia Espondilotoracica: Pacientes con el Síndrome de Insuficiencia Toracica con una expectativa de vida no esperada.** XVIII Congreso Internacional De la Sociedad Mexicana de Ortopedia Pediatrica Septiembre 2004, Ixtapa Zihuatanejo- México

**Spondylothoracic Dysplasia: A Natural History Model for Patients with Inhibitory Effects of the Growth of the Spine.** Norman Ramirez, Alberto S Cornier, Simon Carlo, Robert Campbell, John Flynn, Sandra Arroyo. American Academy of Pediatrics, 2006 Annual National Conference and Exhibition, Atlanta-Georgia

**Use of Vertical Expandable Prosthetic Rib for Management of Spinal Deformity in Non-ambulatory Spina Bifida Patients.** John Flynn, Norman Ramirez, Robert Campbell, John Smith, Randall Betz. American Academy Of Pediatrics, 2006 Annual National Conference and Exhibition, Atlanta-Georgia

**Mortality in Children with Hypoplastic Chest Wall Deformity Following Reconstructive Surgery.** Mj Mulcahey, Randall Betz, Robert Campbell, John Smith John Flynn , Norman Ramirez. IMAST – July 2006. Athens- Greece

**Review of VEPTR in Jarcho – Levin patients.** Nigel Price, Robert Campbell, Norman Ramirez-Lluch. Pediatric Orthopaedic Society of North

America 2007 Annual Meeting , Hollywood - Florida

**Use of Vertical Expandable Prosthetic Rib for Management of Spinal Deformity in Non-ambulatory Spina Bifida Patients.** John Flynn, **Norman Ramirez**, Robert Campbell, John Smith, Randall Betz. EPOS/IFPOS Combined Meeting . EPOS 25 th Annual Meeting 2007 - Sorrento -Italy

**The Natural History of Steel Syndrome.** John Flynn, **Norman Ramírez**, Randall Betz, MJ Mulcahey, Framz Pino, Simon Carlo, Josean Herrera, Alberto S Cornier **30<sup>th</sup>** Brandon Carrell Visiting Professorship. April , 2008. Dallas, Texas.

**Use of Vertical Expandable Prosthetic Titanium Rib in The Management of Early Onset Scoliosis.** Jose Serrano, Laura Aviles, John Flynn, **Norman Ramirez-Lluch**, Simon Carlo, Alberto S-Cornier, Miguel Suarez- Villamil, Ernesto Jusino, Heriberto Sanchez. 4th Scientific Conference , Ponce School of Medicine June 2008

**A Prospective Analysis of a Pediatric Treatment Algorithm.** Jose Serrano, **Norman Ramírez**, John Flynn and Carlo Calvo. Society of Military Orthopaedic Surgeons Annual Meeting Honolulu-Hawaii December 2009

**Effect of Previous Statin Use in Hospital Mortality Of patients With Community Acquired Pneumonia.** Ricardo Hernández, Yazmin Soto, Gloria Jove, **Norman Ramírez**, Dalitza Alvarez, Caroline Nazario, Natalia Soto. 6<sup>th</sup> Annual Scientific Conference Ponce School of Medicine June 2010

**Adequate Vancomycin Dosing Regimen For Inpatients on High Flux Hemodialysis.** Ricardo Hernandez, Edgardo Santiago, Gloria Jove, **Norman Ramírez** , Roberto Lebron, Efrain Florez 6<sup>th</sup> Annual Scientific Conference Ponce School of Medicine June 2010

**How Relevant is the Use of Dennis Brown Bar in the Treatment of Talipe Equino Varus with Ponsetti Serial Casting.** **Norman Ramírez**, John Flynn, Wallace Seda, Jose Serrano, Raul Machiaveli. 6<sup>th</sup> Annual Scientific Conference Ponce School of Medicine June 2010

**Prospective Analysis of a Pediatric Back Pain Treatment Algorithm**  
**Norman Ramírez**, John Flynn, José Serrano , Carlo Calvo 6<sup>th</sup> Annual Scientific Conference Ponce School of Medicine. June 2010

**The use of S-Hook as Pelvic Foundation as Part of Rib Base Construct**  
**Norman Ramírez**, John Flynn, John Smith, Michael Vitale, Charles D' Amato and Ron El- Hawary. 4<sup>th</sup> Early Onset Scoliosis and Growing Spine International Congress. Toronto Canada Nov 2010

**The use of S-Hook as Pelvic Foundation as Part of Rib Base Construct**  
**Norman Ramírez**, John Flynn, John Smith, Michael Vitale, Charles D' Amato and

Ron El- Hawary. 12<sup>th</sup> International Phillip Zorab Symposium – British Scoliosis Society Meeting . London , United Kingdom March 2011

**What are the parameters of thoracic insufficiency syndrome in non-ambulatory Myelodysplasia children?** John Flynn, **Norman Ramírez**, Frances Rodriguez, Bryan Hill Ponce school of Medicine 7th annual Scientific Conference . Ponce Puerto Rico June 2011.

**Anxiety and Psychosocial Disability in patients undergoing repetitive surgery for early – onset scoliosis: We should be worried.** John Flynn, **Norman Ramírez**, Frances Rodriguez, Bryan Hill Ponce School of Medicine 7<sup>th</sup> Annual Scientific Conference . Ponce Puerto Rico June 2011.

**Secondary Thoracic Insufficiency:** John Flynn, **Norman Ramírez**, Francés Rodríguez, Axel Vélez, Francisco Jaume III POSNA – EPOS- SLAOTI- SAOTI International Meeting – Buenos Aires Argentina. Oct 2013

**Podría afectar la espasticidad los resultados en el uso de VEPTR en pacientes con escoliosis neuromuscular?** **Norman Ramírez MD**, John M Flynn MD, Ernesto Sepúlveda MS, Franchesca Cruz MD, Dennis Cummings MD III POSNA – EPOS- SLAOTI- SAOTI International Meeting – Buenos Aires Argentina. Oct 2013

**El uso de Dunn- McCarthy S- Hook en los VEPTR (Costillas expansoras de Titánio):** **Norman Ramírez**, John M Flynn, John Smith, Michael Vitale, Amer Sandami, Charles D' Amato, Peter Sturm , Ron El-Hawary III POSNA – EPOS- SLAOTI- SAOTI International Meeting – Buenos Aires Argentina. Oct 2013

**Variability of Cobb Angle and Spinal Height Measurements in Non-ambulatory Myelodysplastic Children** John M. Flynn MD, **Norman Ramirez MD**, Juan Pretell-Mazzini MD, Derek M. Kelly MD, William C. Warner Jr. MD, Jeffrey R. Sawyer MD III POSNA – EPOS- SLAOTI- SAOTI International Meeting – Buenos Aires Argentina. Oct 2013

**Parallel Proximal Fixation in Rib Based Growing Rod System: A Novel Approach to Deal with Proximal Hook Migration :** John Alexander Heflin,MD; **Norman F. Ramirez-Lluch, MD**; Michelle Cameron Welborn, MD; Ivan Iriarte, MD, MS; Tricia St. Hilaire, MPH; John T. Smith, MD; POSNA 2015 Atlanta – Georgia May 1 2015

**Validity of Clinical Diagnostic Criteria in Pediatric Patients with Back Pain:** Soniely Lugo, Pedro Valentin , Sheila Capre, Ivan Iriarte, **Norman Ramirez** Americo Serra Forum, Hospital San Lucas April 2015

**Validity of Clinical Diagnostic Criteria in Pediatric Patients with Back Pain:**

Soniely Lugo, Pedro Valentin , Sheila Capre, Ivan Iriarte, **Norman Ramirez**

Ponce School of Medicine Scientific Forum June 2015

**Is constant back pain an adequate predictor of the presence of a significant pathology associated with pediatric back pain? Norman Ramirez, Pablo Valentin, Soniely Lugo, Ivan Iriarte.** POSNA 2016, Indianapolis , Indiana April 27 2016

**Vitamin D level and Pediatric Fracture Occurrence Impasse. Where the Pendulum Lie** Jose L. Ortiz Fullana MPH (c), **Norman Ramirez MD FAAP-FAAOS**, Simon Carlo MD , Ivan Iriarte MD-MS, MP Ponce School of Medicine Scientific Forum June 2016

**Spasticity is a risk factor of complications and surgical outcome in the management of early onset neuromuscular scoliosis with a rib-based growing system.** **Norman Ramirez-Lluch MD**, Gerardo Olivella MPH ; Omar Rodriguez BS ; Pablo Marrero MD ; John Smith MD ; Sumeet Garg MD ; Michael Vitale MD ; Randal Betz MD ; Children Spine Study Group . 15th International Phillip Zorab Symposium – British Scoliosis Society Meeting . London , United Kingdom June 2017

**Spasticity is a risk factor of complications and surgical outcome in the management of early onset neuromuscular scoliosis with a rib-based growing system.** **Norman Ramirez-Lluch MD**, Gerardo Olivella MPH ; Omar Rodriguez BS ; Pablo Marrero MD ; John Smith MD ; Sumeet Garg MD ; Michael Vitale MD ; Randal Betz MD ; Children Spine Study Group ICEOS 2017 San Diego USA Nov 2017

**Classification of Early Onset Scoliosis (C-EOS) and Pulmonary Function**

**Outcomes** Klane White, Bompadre Viviana , Norman Ramirez , Shing

Varakitsomboon , Sumeet Garg Gregory Redding , Walter Krenge. ICEOS 2017 San Diego USA Nov 2017

## **LECTURES**

**Puerto Rico Orthopedic Society Meeting-Puerto Rico**

Date: April 1996 1. Idiopathic Scoliosis

**First Caribbean Children Fracture Course: Haiti**

Date: April, 1998 1. Open Fractures Management  
2. Knee Fractures

**Puerto Rico Pediatric Fracture Course- Guanica, Puerto Rico**

Date: April 1998 1. Pediatric Knee Fractures

**7<sup>th</sup> International Orthopedic Trauma and Sports Medicine Meeting – San Juan, Puerto Rico**

Date: Oct. 23, 1999 1. Pediatric Knee Fractures

**Sociedad de Ortopedia de Puerto Rico – Punta Cana, R.D.**

Date: May 25, 2000 1. Vertical Talus

**1<sup>st</sup> Conferencia de Ortopedia Infantil – Santo Domingo, R.D.**

Date: Aug. 26, 2000 1. Idiopathic Scoliosis  
2. Pediatric Fractures

**18<sup>th</sup> Convención Médicos Pediatras Región Norte – Mayagüez, Puerto Rico**

Date: Sept. 2, 2000 1. Idiopathic Scoliosis

**Pediatric Orthopedic Fracture Course. 12<sup>th</sup> Congreso Cubano de Ortopedia y Traumatología. – Holguin, Cuba**

Date: Nov. 21, 2000 1. Knee Fracture

**Pediatric Hip Course. 13<sup>th</sup> Congreso Cubano de Ortopedia y Traumatología Havana-Cuba.**

Date: November 2001 1.Hip Septic Arthritis  
2.Slipped Capital Femoral Epiphysis  
3.Neuromuscular Hip Problems

**Paraguay Pediatric Fracture Course. Asuncion –Paraguay**

Date: January 2002 1.Open Fractures  
2.Knee Fractures  
3.Monteggia Fractures

**Chinese Medical Association Pediatric Meeting. Hong Kong-China**

Date: January 11 2003 1. Distal Femoral Physeal Fracture Management

**Southeast Asia Pediatric Fracture Course- Vietnam : Ho Chi Mihn City, Vietnam**

Date: January 13-14 2003 1. Immediate Hip Spica  
2. Supracondylar Fractures

**Southeast Asia Pediatric Fracture Course- Thailand : Bangkok, Thailand**

Date: January 16-17 2003 1. Immediate Hip Spica  
2. Supracondylar Fractures

## **XVIII Congreso Internacional Sociedad Mexicana de Ortopedia Pediatrica Ixtapa, Zihuatanejo- Mexico**

## **Advanced Medical Technology 2005- CIRACET 5th Bi-annual Seminar Caribe Hilton , San Juan Puerto Rico.**

Date: May 6 2005 Thoracic Insufficiency Syndrome  
VEPTR

SouthAmerica Pediatric Fracture Course- Chile: Santiago City

South America Pediatric Fracture Course- Ecuador: Quito

23th Convención de Medicos Pediatras del Oeste, Ponce , PR

Date : September 3 2005 Thoracic Insufficiency Syndrome

EBI Regional Spine Workshop, San Juan PR

## EBI Regional Spine Workshop, Scoliosis

De La Concepcion Hospital Faculty Convection, Rincon Puerto Rico

Date: August 26, 2006 Thoracic Insufficiency Syndrome

V Congreso Paraguayo de Ortopedia y Traumatología- Paraguay: Asunción

Congreso Paraguayo de Ortopedia y Traumatología  
Date: October 2006

1. Distal Radius
2. Elbow Fractures
3. Tibial Fractures
4. Femur Fractures

XVII Congreso Boliviano de Ortopedia y Traumatología- Bolivia: Santa Cruz

**American Pediatric Academy- Puerto Rico Chapter 2007 Annual Meeting-  
San Juan**

Date: Feb. 2007

1. Congenital Scoliosis

**XVI Congreso Nacional de Ortopedia y Traumatologia- Honduras  
I Congreso CentroAmericanico de Ortopedia Pediatrica. San Pedro  
Sula –Honduras Date : April 2007**

- 1 Congenital Hip Dysplasia
- 2 Pediatric Knee Problems
- 3 Myelomeningocele
- 4 Congenital Scoliosis

**Advanced Medical Technology 2007- CIRACET 6th Bi-annual Seminar  
San Juan Puerto Rico.**

Date: May 2007 La Concepción Management with Complex Scoliosis

**Puerto Rico Orthopaedic Society Annual Meeting- 2007 , Ponce Puerto Rico**

Date: Sept 2007 La Concepcion Management with Early Onset Scoliosis

**Chest Wall and Spine Deformity Study Group Meeting- 2008 Nuevo Mexico**

Date: May 2008 Hypoplastic Chest Deformity

**26 th Convencion Medicos Pediatras Region Oeste – Mayaguez, Puerto Rico**

Date: August 31 2008

- 1. Pediatric Back Pain
- 2. Pediatric Knee problems

**XV Congreso Uruguayo de Ortopedia y Traumatologia- I Curso Traumatologia  
Pediatrica- 2008. Montevideo, Uruguay**

Date: Sept 9-10 2008

- 1. Forearm Fractures
- 2. Femur Fractures
- 3. Tibial Fractures
- 4. Knee Trauma

**XXXIX Congreso Peruano de Ortopedia y Traumatologia- I Curso Internacional  
De Fracturas Pediatricas-2008. Ciudad Trujillo, Peru**

Date: Sept 11-12 2008

- 1. Forearm Fractures
- 2. Femur Fractures
- 3. Tibial Fractures
- 4. Knee Trauma

**American Pediatric Academy- Puerto Rico Chapter 2009 Annual Meeting-  
San Juan**

Date: Feb. 2009

1. Congenital Scoliosis
2. The use of VEPTR in early onset scoliosis

**Latin American Pediatric Association Meeting- San Juan – Puerto Rico**

Date: Nov 2009

1. Congenital Scoliosis
2. Pediatric Fracture Management

**I POSNA/ EPOS/SLAOTI COURSE, IX Brazilian Pediatric Orthopaedic  
Meeting, V Congreso de Sociedad Latino Americana. Sao Paulo Brazil**

Date: June 2010

1. Clinical Application of Growth Modulation
2. Tibial Spine Fracture
3. Hip Fracture/ Dislocations
4. Indications and Technique of Close Reduction  
Of DDH

**28<sup>th</sup> Convención Médicos Pediatras Región Oeste – Mayagüez, Puerto Rico**

Date: Sept. 2, 2010      1. Idiopathic Scoliosis

**6<sup>th</sup> World Congress International Society of Physical Medicine & Rehabilitation  
Medicine ISPRM – San Juan Puerto Rico**

Date: June 13 2011      1. Congenital Scoliosis

**First Pediatric Orthopaedic Course for Pediatrician. San Juan – Puerto Rico**

Date: June 25 2011      1. Back Pain  
                              2. Knee Pain

**II POSNA – EPOS- SLAOTI- SCHOT International Meeting Puerto Varas- Chile**

Date: Nov 2011

1. Clinical Application of Growth Modulation
2. Tibial Spine Fracture
3. Hip Fracture/ Dislocations
4. Indications and Technique of Close Reduction  
Of DDH
5. SCFE : classification and treatment

**First Caribbean Musculoskeletal Dysplasia Congress- San Juan, Puerto Rico**

Date: Nov 2011      1. Orthopedics Manifestations of STD

**Pain Management Symposium 2012- VA Hospital San Juan Puerto Rico**

Date: Nov 3 2011              1. Pediatric Back Pain

**31<sup>th</sup> Convención Médicos Pediatras Región Oeste – Mayagüez, Puerto Rico**

Date: Sept. 2, 2013              1. Spondylothoracic Dysplasia  
                                        2. Congenital Hip Dislocation

**XII Congreso Internacional ORITEL San Juan Puerto Rico**

Date: Sept. 7 2013              1. Neuromuscular Scoliosis

**III POSNA – EPOS- SLAOTI- SAOTI International Meeting – Buenos Aires Argentina.**

Date: Sept 2013

1. Clinical Application of Growth Modulation
2. Hip Fracture/ Dislocations
3. Indications and Technique of Close Reduction Of DDH

**IV POSNA – EPOS- SLAOTI- SAOTI International Meeting – Bogota Colombia.**

Date: Oct 2015

1. Clinical Application of Growth Modulation
2. Hip Fracture/ Dislocations
3. Indications and Technique of Close Reduction Of DDH
3. Early Onset Scoliosis treatment

**XIX Congreso Sociedad Ururuay Traumatología y Ortopedia – Montevideo , Uruguay**

Date: Nov 2016

1. Pediatric Elbow Fracture
2. Lower Extremity Pediatric Fracture

**POSTER PRESENTATION**

**Floating Knee Injuries Treated With Single Percutaneous Approach Vs Traditional Antegrade Femur Fixation: A Comparative Study.** J Rios MD  
V. Ho Fung MS, N.Ramirez MD.American Medical Student Association  
52<sup>nd</sup> Annual Convention , March 7 2002 ; Houston, Texas

**Posteromedial Release for Talipe Equinovarus in Spina Bifida.** J. Flynn MD, R. Fernandez- Feliberti MD, N Ramirez MD, J.Herrera MD, F. Vilella MD  
XX1. Annual Meeting of The European Paediatric Orthopaedic Society  
April ,2002.Istanbul ,Turkey.

**Description of the Pulmonary Function Tests in 13 Spondylothoracic Dysplasia Patients.** A Cornier, AA Reis, JM Massanet , JR Acevedo, S Carlo, V Franceschini, H Rivera, N. Ramirez. The American Society of Human Genetics 53<sup>rd</sup> Annual Meeting , November 2003 , Los Angeles. CA

**Comparison of Height and Thoracic Circumference Measurements of 20 Spondylothoracic Dysplasia patients .** J Massanet, S Carlo, N Ramirez, A Reis H Rivera, J Acevedo, V Franceschini, A Cornier. The American Society of Human Genetics 53<sup>rd</sup> Annual Meeting , November 2003 , Los Angeles.

**Sequential Pulmonary Function Test in 5 Spondylothoracic Dysplasia Patients**  
**N Ramirez,** J Acevedo, S. Carlo,J Massanet, A Reis, H Rivera, V Franceschini A S Cornier. The American Society of Human Genetics 53<sup>rd</sup> Annual Meeting , November 2003,Los Angeles

**Presence of Lactic Acidemia and elevated Lactic-Pyruvate Ratio in patients with Autism.** S Carlo, N Arcinegas, D Valencia, J Acevedo,H Rivera, A Reis J Massanet **N Ramirez,** AS Cornier. The American Society of Human Genetics 53<sup>rd</sup> Annual Meeting , November 2003 , Los Angeles.

**Molecular Characterization of Lesch Nyhan Syndrome in Puerto Rican Family**  
P. Oneill, AS Cornier, N Arciniega, J Acevedo, **N Ramírez**, S Carlo The American Society of Human Genetics 53<sup>rd</sup> Annual Meeting , November 2003 , Los Angeles

**Differences of Anthropomorphic Measurements in the Survival probability of 20 patients with Spondylothoracic Dysplasia.** A Reis, J Massanet, S Carlo, **N Ramirez**, V. Franceschihi, J Acevedo , AS Cornier .The American Society of Human Genetics 53<sup>rd</sup> Annual Meeting , November 2003, Los Angeles

**Spondylothoracic Dysplasia: Patients with Thoracic Insufficiency Syndrome with an unexpected survival rate.** 23<sup>rd</sup> Meeting of the European Paediatric Orthopaedic Society, March 2004. Geneva , Switzerland

**The Natural History of Classical Arthrogryposis.** John Flynn, Fernando Villella, MJ Mulcahey, **Norman Ramirez**, Alberto S-Cornier. 24th Meeting Of the European Paediatric Orthopaedic Society. April 2005 Palma de Mallorca , Spain

**Single Bone Fixation in Both Bone Fractures in the Pediatric Population**  
Artemio Torres, Carlos Foy, A Rodríguez, Nector Ramos ,**Norman Ramirez**

24th Meeting Of the European Paediatric Orthopaedic Society. April 2005  
Palma de Mallorca , Spain

**The Musculoskeletal Manifestations of the Coffy – Lowry Síndrome: A Multicenter Study.** Jose A Herrera – Soto, Lee Segal, **Norman Ramirez- Lluch** Alberto Santiago-Cornier , Junichi Tamai. Pediatric Orthopaedic Society of North America May 2005, Ottawa Canada

**Tissue Reaction to Gamma TiAl in Vivo Rat Model .** Diego F. Castaneda- Muñoz Paul Sundaram , **Norman Ramirez.** III Congreso Internacional De Materiales Septiembre 12 , 2005 Cartagena De Indias, Colombia

**Review of VEPTR in Jarcho – Levin patients.** Nigel Price, Robert Campbell, **Norman Ramirez-Lluch.** IMAST 2006 Athens- Greece

**Mortality in Children with Hypoplastic Chest Wall Deformity Following Reconstructive Surgery.** Mj Mulcahey, Randall Betz, Robert Campbell, John Smith John Flynn , **Norman Ramirez.** Scoliosis Research Society 41<sup>st</sup> Annual Meeting September 2006, Monterey , California

**Controversies in Jarcho-Levin Syndrome: Spondylothoracic Dysplasia vs Spondylocostal Dysplasia.** **Norman Ramírez**, John Flynn, Alberto S. Cornier Simon Carlo, Nigel Price , Frans Pino. 1<sup>st</sup> International Congress on Early Onset Scoliosis and Growing Spine Nov 2007 Madrid Spain

**The Natural History of a Syndrome of Dislocated Hips, Radial Heads Dislocation, Carpal Coalition, and Short Stature in Children .** John Flynn, **Norman Ramírez**, Randall Betz, MJ Mulcahey, Framz Pino, Simon Carlo, Josean Herrera, Alberto S Cornier 2008 Pediatric Orthopaedic Society Of North America Annual Meeting Albuquerque New Mexico April 2008

**Hemoglobin Level May be a Useful Surrogate Measure of Respiratory Function in TIS and Early Onset Scoliosis** Jean-Francois Caubet, MD ,John B Emans, MD John T Smith, MD ,Harold Van Bosse, MD ,**Norman Ramirez, MD** ,John Flynn, MD , Michael Vitale, MD ,Melissa Smith, RN ,Tricia St.Hilaire, BS IMAST 2008 Hong Kong- China

**Selective Treatment of Thoracic Curve by VEPTR in the growing spine: what happens to the lumbar curve?** A . Samdani, J. Birkens, R. Williams, **N. Ramirez** J Flynn, R. Betz. IMAST 2009 Austria

**Selective Treatment of Thoracic Curve by VEPTR in the growing spine: what happens to the lumbar curve?** A . Samdani, J. Birkens, R. Williams, **N. Ramirez** J Flynn, R. Betz. SRS 2009 San Antonio Texas. USA

**Anxiety and Psychosocial disability in patients undergoing repetitive surgery for Early Onset Scoliosis: We should be worried.** Michael Vitale, Daniel Miller

**Norman Ramírez**, Frances Torres, Hiroko Matsumoto, MJ Mulcahey, John Flynn  
IMAST 2010. Toronto, Canada.

**The use of S-Hook as Pelvic Foundation as Part of Rib Base Contract**

**Norman Ramírez**, John Flynn, John Smith, Michael Vitale, Charles D' Amato and Ron El- Hawary. Eleventh Annual Scientific Conferences of the Canadian Spine Society March 2011 Quebec City Canada.

**Validation of Feldman's Back Pain Algorithm: MRI role in pediatric back pain Diagnosis.** **Norman Ramirez**, Brian Hill, Carlos Calvo, Jose Serrano, John Flynn 2012 POSNA Annual Meeting, May 2012 Denver Colorado.

**Survey of cause of death in the patients with Thoracic Insufficiency Syndrome**  
Shiro Imagama, Noriaki Kawakami, Taichi Tsuji, Ryoji Touchi, John Emans, John Flynn, **Norman Ramirez**, Shohei Minami, Tashiaki Katani, Horushia Yanagida Toru Hirano, Nooki Ishiguro; the Japanese TIS study group, Chest Wall and Spine Deformity Study Group 19 th International Meeting on Advanced Spine Techniques July 18-21 2012 Istanbul, Turkey

**Variability of Cobb Angle and Spinal Height Measurements in Non-ambulatory Myelodysplastic Children.** John M. Flynn MD, **Norman Ramirez MD**, Juan Pretell-Mazzini MD<sup>2</sup>, Derek M. Kelly MD<sup>2</sup>, William C. Warner Jr. MD<sup>2</sup>, Jeffrey R. Sawyer MD The Orthopaedic Clinical Society 101Th Annual Meeting Buffalo New York Sept 2013.

**Reliability analysis for Cobb angle measurements of congenital scoliosis using X ray and 3D-CT** Ryoji Tauchi<sup>1</sup>, Taichi Tsuji, Toshiki Saito , Ayato Nohara , Shiro Imagama , Ajeya P. Joshi, David P. Roye, Jr, Michael Glotzbecker, Jeffrey R. Sawyer, John A. Heflin, John M. Flynn, John T. Smith, **Norman Ramirez**, Patrick J. Cahill, Ron El-Hawary, Noriaki Kawakami. ICEOS 2014 San Diego - California

**Secondary Thoracic Insufficiency Syndrome in None Ambulatory Myelodysplastic Children** **Norman Ramirez, MD**; Pablo Valentin, BS; Frances M. Rodriguez, BS-RT; Francisco Jaume, MD; Axel Velez, MD; Ivan Iriarte, MD; John M. Flynn, MD (Deceased ) ICEOS 2015 Boston, Masssachusetts

**Spasticity is a risk factor of complications and surgical outcome in the management of early onset neuromuscular scoliosis with a rib-based growing system.** **Norman Ramirez-Lluch MD**, Gerardo Olivella MPH ; Omar Rodriguez BS ; Pablo Marrero MD ; John Smith MD ; Sumeet Garg MD ; Michael Vitale MD ; Randal Betz MD ; Children Spine Study Group. Scoliosis Research Society Annual Meeting. Philadelphia – Pennsilvania USA 2017

**Classification of Early Onset Scoliosis (C-EOS) and Pulmonary Function Outcomes** Klane White, Bompadre Viviana , Norman Ramirez , Shing Varakitsomboon , Sumeet Garg Gregory Redding , Walter Krenge. AAOS 2018 Annual Meeting March 6-10 New Orleans, Louisiana- USA

**Are there any associations between back pain and AIS with the possibility of an underlying pathology? Norman Ramirez, Gerardo Olivella . 2018 POSNA Meeting Austin , Texas - USA**

**CHAIRMAN:**

**Puerto Rico Pediatric Fracture Course- April 1999**

**First Dr. Fernandez-Feliberti Orthopaedic Forum- May 2001**

GUEST SPEAKER: DR KAYE WILKINS

**Paraguay Pediatric Fracture Course- January 2002**

**Second Dr. Fernandez-Feliberti Orthopedic Forum – May 2002**

GUEST SPEAKER: DR HENRY MANKIN

**Third Dr. Fernandez – Feliberti Orthopedic Forum- May 2003**

GUEST SPEAKER: DR CHARLES ROCKWOOD

**Fourth Dr. Fernández-Feliberti Orthopaedic Forum- May 2004**

**Fifth Dr. Fernández- Feliberti Orthopedic Forum May 2005**

GUEST SPEAKER: DR HAMLET PETERSON

**Chile Pediatric Fracture Course- June 2005**

**Ecuador Pediatric Fracture Course- June 2005**

**Paraguay Pediatric Fracture Course- October 2006**

**Bolivia Pediatric Fracture Course- October 2006**

**Uruguay Pediatric Fracture Course- Sept 2008**

**Peru Pediatric Fracture Course- Sept 2008**

## **AWARDS**

- RESIDENT RESEARCH'S AWARD , 1994– ORTHOPAEDIC DEPARTMENT
- . BEST RESEARCH PRESENTATION – SMOP 2000
- DOCTOR'S CHOICES AWARD- PED.ORTHOP. BUENA VIDA 2002
- DOCTOR'S CHOICES AWARD- PED.ORTHOP. BUENA VIDA 2003
- THE AMERICAN JOURNAL OF ORTHOPEDICS 2004 RESIDENT WRITER'S AWARD- 2nd PLACE.
- DOCTOR 'S CHOICE AWARD- PED. ORTHO . BUENA VIDA 2005
- GUIDE TO AMERICAN 'S TOP PHYSICIANS- 2004-2005 EDITION CONSUMERS' RESEARCH COUNCIL OF AMERICA
- DOCTOR 'S CHOICE AWARD – PED ORTHOP. BUENA VIDA 2006
- HONOR CITIZEN – SAN PEDRO SULA -HONDURAS
- DOCTOR 'S CHOICE AWARD – PED ORTHOP. BUENA VIDA 2007
- DOCTOR 'S CHOICE AWARD – PED ORTHOP. BUENA VIDA 2008
- PONCE SCHOOL OF MEDICINE. 4TH ANNUAL SCIENTIFIC CONFERENCE  
FIRST PRIZE-ORAL PRESENTATION- MEDICINE 2008
- MERCK HEALTH INNOVATION AWARD -2008 CLINICAL INVESTIGATION
- DOCTOR' S CHOICE AWARD – PED ORTHOP. BUENA VIDA 2009
- DOCTOR' S CHOICE AWARD – PED ORTHOP. BUENA VIDA 2010
- PONCE SCHOOL OF MEDICINE 6 TH ANNUAL SCIENTIFIC CONFERENCE.  
SECOND PRIZE- ORAL PRESENTATION- MEDICINE 2010
- THIRD PRIZE – ORAL PRESENATION - MEDICINE 2010
- PONCE SCHOOL OF MEDICINE 7<sup>TH</sup> ANNUAL SCIENTIFIC CONFERENCE  
FIRST PRIZE –ORAL PRESENTATION – BEHAVIORAL SCIENCE-2011

- DOCTOR' S CHOICE AWARD – PED ORTHOP. BUENA VIDA 2011
- PONCE SCHOOL OF MEDICINE 10 TH ANNUAL SCIENTIFIC CONFERENCE. SECOND PRIZE- ORAL PRESENTATION- MEDICINE 2015
- AMERICO SERRA FORUM- FIRST PRICE ORAL PRESENTATION 2015
- PONCE SCHOOL OF MEDICINE 11 TH ANNUAL SCIENTIFIC CONFERENCE. THIRD PRIZE- ORAL PRESENTATION- MEDICINE 2016
- PHYSICIAN QUALITY AWARD – 2016 HOSPITAL DE LA CONCEPCION