## Luis C. Grau M.D.

# Board Certified Orthopaedic Surgeon Fellowship Trained, Adult Joint Reconstruction

WORK EXPERIENCE	
Hudson Orthopaedic Pain and Spine	October 2022
Medical Director, Orthopaedic Surgery	

**Riverside Orthopaedic Institute**Medical Director, Orthopaedic Surgery
September 2019- September 2022

Chief, Adult Joint Reconstruction
Riverside Medical Group

**Rothman Reconstructive Associates**August 2018 – August 2019

Attending Physician, Orthopaedic Trauma call *Atlanticare* 

#### **POSTGRADUATE TRAINING**

Adult Joint Reconstruction Fellowship August 2018 – August 2019

The Rothman Institute

Orthopaedic Surgery Residency June 2013 – July 2018

University of Miami – Jackson Memorial Hospital

### EDUCATION

AOA Honors
University of Illinois at Chicago, College of Medicine

Bachelor of Science, B.S. 2005-2009

2009-2013

magna cum laude Honors *University of Miami* 

Doctor of Medicine, M.D.

#### **LICENSURE & MEMBERSHIP**

American Board of Orthopaedic Surgery	Current
New Jersey Medical License 25MA10304600	Current
New Jersey DEA D11205500	Current
Florida Medical License ME152021	Current
New York State Medical License 324880	Current
American Academy of Orthopaedic Surgeons	Current
American Association of Hip and Knee Surgeons	Current
International Congress for Joint Reconstruction	Current

Administrative Service	
Director, Robotic Joint Replacement, Hudson Regional Hospital	Current
Director, Riverside Orthopaedic Institute	2019-2022
Chief, Adult Joint Reconstruction, Riverside Orthopaedic Institute	2019-2022
OR Executive Committee, Palisades Medical Center	2021-2022
Chief Resident, Orthopaedic Surgery, University of Miami – Jackson Memorial Hospital	2018
Operating Room Committee, Resident Member, Jackson Memorial Hospital	2016-2018
Class President, University of Illinois at Chicago, College of Medicine	2009-2010

#### **HONORS & AWARDS**

Castle Connolly Top Doctor, New York Metropolitan Area 202	2/2023
Castle Connolly Rising Star, New York Metropolitan Area	2022
SRC Robotic Joint Replacement Center of Excellence, Hudson regional Hospital	2022
Clinical Excellence Award, Hudson Regional Hospital 2021/202	2/2023
Alpha Omega Alpha Medical Honor Society, University of Illinois at Chicago, College of Medicine (top 4%)	2013
James Scholar Award for Independent Research, University of Illinois at Chicago College of Medicine	2013
Department of Medical Education Research Award, University of Illinois at Chicago, College of Medicine	2010
Honors Program Graduate, University of Miami	2009
Departmental Honors in Neuroscience, University of Miami	2009
Honors Thesis Completion, University of Miami	2009
President's/ Provost's Honor Roll, University of Miami Fall 2005- Sprin	ıg 2009
Phi Kappa Phi Honor Society, University of Miami	2008
National Honors Society of Collegiate Scholars, University of Miami	2006
Golden Key Honor Society, University of Miami	2007
Gamma Epsilon Phi Honor Society, University of Miami	2007

#### **Academic Research Committees**

American Journal of Orthopaedics, Editorial Board Member

2018-2020

#### **RESEARCH FUNDING**

\$55,000

<u>Miami Center for Orthopaedic Resesrch and Education Grant (CORE)</u>. Funding for a series of sawbones, cadeveric and finite element model studies aimed at determining the role of femoral component sizing and rotation on anterior femoral cortical notching and periprosthetic fracture.s **Luis C Grau M.D** & Michaela Schneiderbauer M.D, MBA. University of Miami Department of Orthoapedics

#### **PUBLICATONS – Peer Reviewed**

- 1. **Grau LC**. The Association Between the Patient-Physician Relationship and Adherence to Antiretroviral Medications. *Senior Thesis- University of Miami, Honors College. June 2009.*
- 2. Rothenberg PM, **Grau LC**, Baraga MG. Kaplan L. Knee Inuries in American Football: an Epidimiological Review. *American Journal of Orthopaedics*. 45(6):368-373. September Issue, 2016. PMID:27737282
- 3. **Grau LC**, Jose JJ, Sama A, Baraga MG. Osteochondritis Dissecans of the Glenoid in a Major League Baseball Prospect. *JBJS Case Connector*. December Issue, 2016. PMID:29252753
- 4. **Grau LC**, Chen K, & Goldberg B. A Novel Technique for Repair of Subscapularis Herniation Though a Scapular Body Defect. *World Journal of Orthopaedics*. February Issue, 2017. PMID:28251072

- 5. **Grau LC**, Gunder M, Schneiderbauer M. Intraoperative Culture Confirmed *P. acnes* Periprosthetic Joint Infections in Patients with Normal Inflammatory Markers and Synovial Fluid Analysis. *American Journal of Orthoapedics*. May Issue, 2017. PMID:28666043
- 6. Merose O, Rosas S, Kurowicki J, Zachwieja E, **Grau LC** & Hernandez VH, Trends In Hip Resection Arthroplasty In The Medicare Patient Population From 2005 To 2012. *Journal of Hip Surgery*. May Issue, 2017.
- 7. Mitchell D, **Grau LC**, Summers S, Rosas S, Schneiderbauer M, Ong A & Hernandez VH. Novel Synovial Fluid Markers and PCR in the Diagnosis of Periprosthetic Joint Infection. *American Journal of Orthopaedics*. June issue, 2017. PMID: 28856346
- 8. **Grau LC**, Baydoun HE, Chen K, Solitro GF, Gonzalez MH, Amirouche F, Sankary S. Biomechanics of the Acute Boutonnière Deformity. *Journal of Hand Surgery*. September Issue, 2017. PMID: 28888567
- 9. Ennis H, **Grau LC**, Karim J, Jose J, Baraga M, Kaplan L & Andrews J. Radial Shaft Stress Fractures in the Elite Throwing Athlete. *American Journal of Orthopaedics*. October Issue, 2017. PMID:29099895
- 10. **Grau LC**, Summers S, Rosas S, Massel DH, Ong A, Varon MP & Hernandez VH. Operative Trends in Surgical Management and Perioperative Outcomes of Femoral Neck Fractures in the US. *American Journal of Orthopaedics*. November Issue, 2018.
- 11. Summers S, **Grau LC**, Massel DH, Rosas S, Ong A, Hernandez V. Opioid Use Disorders are Associated with Perioperative Morbidity and Mortality in the Hip Fracture Population. *Journal of Orthopaedic Trauma*. January Issue, 2017. PMID: 29356800
- 12. **Grau LC**, Summers S, Massel DH, Rosas S Ong A, & Hernandez VH. Operative Trends in the Surgical Treatment of Hip Fractures and the Role of Arthroplasty. *Journal of Geriatric Orthopaedics and Rehabilitation*. March Issue, 2018. PMID: 29619275
- 13. **Grau LC**, Summers S, Massel DH, Rosas S, Ong A, Hernandez V & Merose O. Hepatitis C is an Independent Risk Factor for Perioperative Complications and Adverse Events in Patients with Hip Fractures. *Journal of Orthopaedic Trauma*. November issue, 2018. PMID:30339646
- 14. Grau LC, Collon K, Kaimrajh D, Alhandi A, Latta L, Varon MP & Vilella F. Filling Open Screw Holes in Area of Metaphyseal Comminution Does Not Affect Fatigue Life of the Synthes Variable Angle Distal Femoral Locking Plate in AO/OTA 33-A3 Fracture Model. Surgical Technology International. Volume 32 April Issue, 2018. PMID: 29791694
- 15. **Grau LC,** Orozco FR, Duque AF, Post ZD, Ponzio DY & Ong AC. A Simple Protocol to Stratify Pulmonary Risk Reduces Complications After Total Joint Arthroplasty. J Arthroplasty. 2019 Jun;34(6):1233-1239. doi: 10.1016/j.arth.2019.01.048. PMID: 30777628
- 16. Kong X, **Grau LC**, Ong A, Yang C, & Chai W. Adopting the direct anterior approach: experience and learning curve in a Chinese patient population. J Orthop Surg Res. 2019 Jul 16;14(1):218. doi: 10.1186/s13018-019-1272.

- 17. **Grau LC**, Lingamfelter M, Ponzio DY, Post Z, Ong A & Orozco F. Robotic Arm Assisted, Total Knee Aethroplasty Workflow Optimization, Operative Times and Learning Curve. *Arthroplasty Today.* June Issue, 2019. PMID: 31886390
- 18. **Grau LC**, Butler A, Summers S, Massel DH, Ong AC & Hernandez VH. The Association of Mental Health Disease and perioperative Outcomes Following Femoral Neck Fractures. *Journal of Clinical Orthopaedic Trauma*. October Issue, 2019. PMID: 31695264
- 19. Deiter J, Ponzio D, **Grau LC**, Griffiths S, Ong A, Post Z, Doucette D & Orozco F. Efficacy of Adductor Canal Protocol Implementation in a Multimodal Pain Management Protocol for Total Knee Arthroplasty. *Journal of Clinical Orthopaedic Trauma*. January Issue, 2020. PMID:32001998
- 20. Yaccovelli S, Grau LC, Hozack WJ & Courtney M. Functional Outcomes are Comparable between Posterior Stabilized and Cruciate Substituting Total Knee Arthroplasty Designs at Short-Term Follow-up. *Journal of Arthroplasty*. September Issue, 2020. PMID: 32994108
- 21. **Grau LC,** Ong AC, Restrepo S, Griffiths SZ, Hozack WJ, & Smith EB. Survivorship, Clinical and Radiographic Outcomes of a Novel Cementless Metal-Backed Patella design. J Arthroplasty 2021 Feb 16;S0883-5403(21)00171-6. PMID: 33676814
- *22.* Bell C, **Grau LC**, Orozco F, Ponzio M, Post Z, Czymek M & Ong A. Succesful Implementation of the Navio Robotic Technology Required 29 cases. Journal of Robotic Surgery. June issue, 2021. PMID: 34146231

#### **BOOK CHAPTERS**

1. **Grau LC**, Patel A, Gray R. Traumatic and Degenerative Injuries of the Extensor Mechanism. *Evaluation and Management of Common Upper Extremity Disorders: A Practical Handbook. SLACK*. 2014.

#### **PRESENTATIONS**

- 1. **Grau LC**, Levitt MJ, Lane J D, & Levitt J. Parent-Child Relationships and Peer Association in Immigrant Children and Adolescents. Presented at the Annual Meeting of the *Society for Research in Child Development*, Boston, MA. March 2007.
- 2. **Grau LC**, Baydoun HE, Chen K, Solitro GF, Gonzalez MH, Amirouche, F, Sankary S. Dynamic Tracking of the Acute Boutonniere Deformity. Presented at the Annual *University of Illinois College of Medicine Research Forum*, Chicago, IL. November 2011.
- 3. **Grau LC**, Zhao L, Morris DE, Patel PK. Three-Dimensional Quantification of Upper Airway Changes Following Mandibular Advancement in patients with Retrognathia. Presented at the Annual *University of Illinois College of Medicine Research Forum*, Chicago, IL. November 2011.
- 4. **Grau LC**, Baydoun HE, Weisburger MC, Gonzalez, MH. Acute Boutonniere Deformity- Recreating a Cadaveric Model. Presented at *Mid-America Orthopaedic Association* Annual Meeting, Tucson, AZ. April 2011.
- 5. **Grau LC**, Baydoun HE, Chen K, Solitro GF, Gonzalez MH, Amirouche F, Sankary S. Biomechanics of the Acute Boutonniere Deformity. Presented at the *American Society for Surgery of the Hand* Annual Meeting, Chicago, IL. September 2012.
- 6. **Grau LC** & Siemionow KB. Staged vs Same Day Anterior-Posterior Cervical Decompression and Fusion Crossing the Cervico-Thoracic Junction. Presented at the Annual meeting of *American Academy of Orthopaedic Surgeons*, Chicago, IL. March 2012.

- 7. **Grau LC**, Chen K, Goldberg B. A Novel Technique for the Treatment of Subscapularis Herniation in Scapular Body Non-union. Presented at the *Southern Orthopaedic Association* Annual Meeting. Beavercrek, CO. July 2014.
- 8. **Grau LC**, Baraga MG, Jose JJ. Osteochondritis Dissecans of the Glenoid in a Throwing Athlete. Presented at the *Southern Orthopaedic Association* Annual Meeting. Beavercreek, CO. July 2014.
- 9. **Grau LC** & Schneiderbauer M. Diagnosis and Treatment of Low-Virulence Organisms in Periprosthetic Joint Infections. Presented at the *Southern Orthopaedic Association* Annual Meeting. New Orleans, LA. July 2015.
- 10. **Grau LC**, Wodika R & Kaplan L. Anterolateral Ligament Reconstruction for Rotational Instability of the Knee. Presented at the Annual *American Orthopaedic Society for Sports Medicine* Meeting. Orlando, FL. July 2015.
- 11. Solomon RA, S Asfour, **Grau LC**, L. Latta, & F. Travascio. Post-Operative Implications of Femoral Notching, Overstuffing, and Implant Rotation in Total Knee Arthroplasty on Femoral Biomechanics: a Finite Element Model. Presented at the Annual *Orthopaedic Research Society* Meeting. San Diego, CA. March 2016.
- 12. Grau LC. The Patello Femoral Joint in Total Knee Arthroplasty: Past, Present and Future. Grand Rounds Presentation. University of Miami Department of Orthopaedics. Miami, FL. March, 2016.
- 13. Summers S, **Grau LC**, Massel DH, Ong A Hernandez V. Trends in Surgical Management and Perioperative Outcomes of Femoral Neck Fractures in the US. Presented at the Annual *PanPacific Orthopaedic Conference, International Congress for Joint Reconstruction* Meeting. Kona, Hawaii. August 2016.
- 14. Massel DH, **Grau LC**, Summers S, Vilella F, Ong A, Hernandez V. Hepatitis C is an Independent Risk Factor for Perioperative Complications and Adverse Events in Patients with Hip Fractures. Presented at the Annual *PanPacific Orthopaedic Conference, International Congress for Joint Reconstruction* Meeting. Kona, Hawaii. August 2016.
- 15. **Grau LC**, Massel DH, Summers S, Zych G, Ong A, Hernandez V. Operative Trends in the Treatment of Hip Fractures and the Role of Total Hip Arthroplasty. Presented at the Annual *PanPacific Orthopaedic Conference, International Congress for Joint Reconstruction* Meeting. Kona, Hawaii. August 2016.
- 16. **Grau LC**, Summers S, Massel DH, Hutson J, Ong A, Hernandez V. Mental Health Disease and Perioperative Outcomes Following Hip Surgery. Presented at the Annual *PanPacific Orthopaedic Conference, International Congress for Joint Reconstruction* Meeting. Kona, Hawaii. August 2016.
- 17. Summers S, **Grau LC**, Massel DH, Varon MP, Ong A, Hernandez V. The Influence of Drug Misuse on Perioperative Outcomes Following Hip Surgery. Presented at the Annual *PanPacific Orthopaedic Conference, International Congress for Joint Reconstruction* Meeting. Kona, Hawaii. August 2016.
- 18. **Grau LC**, Alhandi A, Gunder M, Varon MP & Schneiderbauer M. The Effect Of Femoral Component Sizing And Rotation On Anterior Femoral Notching. Presented at the Annual *PanPacific Orthopaedic Conference, International Congress for Joint Reconstruction* Meeting. Kona, Hawaii. August 2016.
- 19. Mitchell D, **Grau LC**, Summers S, Rosas S, & Hernandez VH. A Meta Analysis of Novel Synovial Fluid Markers and PCR in the Diagnosis of Periprosthetic Joint Infection. Presented at the Annual *PanPacific Orthopaedic Conference, International Congress for Joint Reconstruction* Meeting. Kona, Hawaii. August 2016.

- 20. **Grau LC**, Gunder M & Schneiderbauer M. Low-Virulence Organisms in Periprosthetic Joint Infections. Pesented at the *European Bone and Joint Society* Annual Meeting. Oxford, United Kingdom. September 2016.
- 21. Ennis H, **Grau LC**, Jose J, Baraga M, Kaplan L & Andrews J. Radial Shaft Stress Fractures in the Elite Throwing Athlete. Presented at the *Clinical Orthopaedic Society* Annual Meeting. New Orleans, LA. September 2016.
- 22. Mitchell D, **Grau LC**, Summers S, Rosas S, & Hernandez VH. Novel Synovial Fluid Markers and PCR in the Diagnosis of Periprosthetic Joint Infection. Presented at the Annual *Clinical Orthopaedic Society* Annual Meeting. New Orleans, LA. September 2016.
- 23. **Grau LC**, Gunder M & Schneiderbauer M. Low-Virulence Organisms in Periprosthetic Joint Infections. Pesented at the *European Bone and Joint Society* Annual Meeting. Oxford, United Kingdom. September 2016.
- 24. **Grau LC**, Summers S, & Hernandez VH. Operative Trends in Surgical Treatment of Femoral Neck Fractures: Hemiarthroplasty vs Total Hip Arthroplasty. Presented at the *Clinical Orthopaedic Society* Annual Meeting. New Orleans, LA. September 2016.
- 25. **Grau LC**, Summers S, Massel DH, Ong AC, Vilella F & Hernandez VH. Hepatitis C is an Independent Risk Factor for Perioperative Complications and Adverse Events in Patients with Hip Fractures. Presented at the Annual Meeting of the *American Association of Hip and Knee Surgeons*. Dallas, TX. November 2016.
- 26. **Grau LC**, Summers S, Massel DH, Hutson JJ, Ong AC, Hernandez VH. Mental Health Disease and Perioperative Outcomes following Hip Surgery. Presentation at the *Annual Meeting of the American Association of Hip and Knee Surgeons*. Dallas, TX. November 2016.
- 27. **Grau LC**, Summers S, Massel DH, Zych GA, Ong AC, Hernandez VH. Operative Trends in the Treatment of Hip Fractures and the Role of Total Hip Arthroplasty. Presented at the Annual Meeting of the *American Academy of Orthopaedic Surgeons*. San Diego, CA. March 2016.
- 28. Rosas S, Buller L, Hernandez VH, Orozco F Post, Z, **Grau LC** & Ong, A. Complication Incidence in Total Hip Arthroplasty: Does Season Influence the Outcome? Presented at the 37th *SICOT Orthopedic World Congress*. September 2016, Rome, Italy
- 29. Rosas S, Buller L, Hernandez VH, Orozco F, Post Z, **Grau LC** & Ong,A. Complication Incidence in Total Hip Arthroplasty: Does Season Influence the Outcome? Presented at the *Eastern Orthopaedic Association* Annual Meeting, October 2016, New Orleans, LA.
- 30. **Grau LC**, Alhandi A, Gunder M, Lawrite C & Schneiderbauer M. The Accuracy of Femoral Component Sizing and the Effect of Sizer Rotation. Abstract presented at the Annual Meeting of the *America Academy of Orthopaedic Surgeons*. San Diego, CA. March 2017.
- 31. **Grau LC**, Alhandi A, Gunder M, Lawrire C, Carvajal JA & Schneiderbauer M. The Effect of Femoral Component Sizing and Rotation on Anterior Femoral Notching. Presented at the Annual *Orthopaedic Research Society* Meeting. San Diego, CA. March 2017.
- 32. **Grau LC**, Alhandi A, Gunder M, Lawrite C, Carvajal JA & Schneiderbauer M. The Accuracy of Femoral Component Sizing and the Effect of Sizer Rotation. Presented at the Annual Meeting of the *America Academy of Orthopaedic Surgeons*. San Diego, CA. March 2017.
- 33. **Grau LC**, Robinson R, Sabeh K, Solomon R, Sori A, Miline T & Latta L. Evaluation of the Natural Patella and the Logic PS Knee Under Physiologic Loading. Presented at the Annual *Orthopaedic Research Society Meeting*. San Diego, CA. March 2017.

- 34. **Grau LC**, Kaimrajh D, Collon KW, Alhandi AA, Latta & Vilella F. Failure of Depuy Synthes VA-LCP Curved Condylar Plate in the Management of OTA/AO 33-A3.3 Fractures Does Filling Open Screw Holes Make a Difference? Presented at the Annual *Orthopaedic Research Society Meeting*. San Diego, CA. March 2017.
- 35. Zachwieja E, Hannay WM, Rosas S, Lawrie C, **Grau LC**, & Schneiderbauer M. Direct Anterior Total Hip Arthroplasty: Fracture Table Vs Standard Operating Table, is There a Difference? Presented at the Annual *Orthopaedic Research Society Meeting*. San Diego, CA. March 2017.
- 36. **Grau LC**, Kaimrajh D, Collon KW, Alhandi AA, Latta & Vilella F. Failure of Depuy Synthes VA-LCP Curved Condylar Plate in the Management of OTA/AO 33-A3.3 Fractures Does Filling Open Screw Holes Make a Difference? Presented at the Annual *Florida Orthopaedc Society Meeting*, Key Largo, FL. May 2017.
- 37. Mitchell D, **Grau LC**, Summers S, Rosas S, & Hernandez VH. A Meta Analysis of Novel Synovial Fluid Markers and PCR in the Diagnosis of Periprosthetic Joint Infection. Presented at the Annual *Florida Orthopaedc Society Meeting*, Key Largo, FL. May 2017.
- 38. **Grau LC**. Geriatric Hip Fractures. Grand Rounds Presentation. *University of Miami Department of Orthopaedics*. Miami, FL. March, 2018.
- 39. **Grau LC** & Orozco F. Quad Sparring Approaches in Total Knee Arthroplasty. *Rothman Institute Lecture Series.* Margate, New Jersey. August 2018.
- 40. **Grau LC,** Orozco F, & Rothman D. Outpatient Total Joint Arthroplasty. Rothman Institute Lecture Series. Margate, New Jersey. August 2018.
- 41. A Dugue, D Ponzio, F Orozco, Z Post, **Grau LC** & A Ong. To retain or not? The Fate of Patellar Revision in Patients with Aseptic Patellar Component Loosening. Presented at the Annual *SICOT Meeting*. Montreal, Canada. October 2018.
- 42. **Grau LC**, A Dugue, D Ponzio, F Orozco, Z Post & A Ong. To retain or not? The Fate of Patellar Revision in Patients with Aseptic Patellar Component Loosening. Presented at the Annual American Academy of Orthopaedic Surgeons Meeting. Las Vegas, NV. March 2018
- 43. Grau **LC,** Orozco F, Duque AF, Bi D, Post Z, Ponzio D, Ong A. Abstract Number P0150. The Fate of Patellar Component Revision in Patients with Isolated Loosening: A Unique Revision Patellar Component Design. AAOS Annual Meeting, Las Vegas, Nevada, USA. March 12-16, 2019.
- 44. Duque AF, Ong A, Boyle P, Mora A, Post Z, **Grau LC**, Ponzio D, Orozco F. Delaying Physical Therapy Prolongs Total Knee Arthroplasty Recovery. Abstract Number P0654. AAOS Annual Meeting, Las Vegas, Nevada, USA. March 12-16, 2019.
- 45. **Grau LC**, Orozco F, Griffiths S, Le D, Bianco L, Duque AF, Post Z, Ponzio D, Ong A. Survivorship And Radiographic Outcomes Of A 3D Printed Highly Porous Augment Cone In Revision Total Knee Arthroplasty. Abstract Number 3154. EFORT 20<sup>th</sup> Congress, Lisbon, Portugal. June 5-7, 2019.
- 46. Duque AF, Orozco F, Cohen J, Ponzio D, Post Z, **Grau LC** Ong A. Is Fever Unnecessarily Delaying Hospital Discharge After Total Joint Arthroplasty? Abstract Number 3129. EFORT 20<sup>th</sup> Congress, Lisbon, Portugal. June 5-7, 2019.
- 47. Lingamfelter M, Orozco F, Beck C, Duque AF, Post Z, Ong A, **Grau LC** & Ponzio D. Nutritional Counseling Program In Morbidly Obese Patients Enables Weight Optimization For Safe TJA. Abstract Number 3102. EFORT 20<sup>th</sup> Congress, Lisbon, Portugal. June 5-7, 2019.

- 48. **Grau LC,** Orozco F, Griffiths S, Le D, Bianco L, Duque AF, Post Z, Ponzio D, Ong A. Survivorship Of A Novel Cementless Metal Backed Patella Design. Abstract Number 3122. EFORT 20<sup>th</sup> Congress, Lisbon, Portugal. June 5-7, 2019.
- 49. **Grau LC**, Orozco F, Griffiths S, Le D, Bianco L, Duque AF, Post Z, Ponzio D, Ong A. Abstract Number 3079. Survivorship Of A Modern Press-Fit Total Knee Replacement Design. EFORT 20<sup>th</sup> Congress, Lisbon, Portugal. June 5-7, 2019.
- 50. Nugent R, **Grau LC**, Ong AC, Orozco FR, Duque AF, Ponzio DY, Post ZD. October 16-19, 2019. Direct Anterior Approach for Revision Total Hip Arthroplasty. Poster Number 38. 50<sup>th</sup> EOA Annual Meeting, Palm Beach, Florida, USA.
- 51. Lingamfelter M, Orozco F, **Grau LC**, Beck C, Duque AF, Post Z, Ong A, Ponzio D.March 12-16, 2019. Nutritional Counseling Protocol in Obese Patients Enables Weight Optimization for Safe Total Joint Arthroplasty. L Paper Number 816. AAOS Annual Meeting, Las Vegas, Nevada, USA.
- 52. **Grau LC**, Orozco F, Griffiths S, Le D, Bianco L, Duque AF, Post Z, Ponzio D, Ong A. December 4-7, 2019. Clinical and Radiographic Outcomes of Modern Cementless Total Knee Design. Abstract Number: 55150. 40th SICOT World Orthopaedic Congress, Muscat, Oman.
- 53. **Grau LC**, Orozco F, Griffiths S, Bianco L, Le D, Duque AF, Post Z, Ponzio D, Ong A. December 4-7, 2019. Clinical and Radiographic Outcomes of Novel Highly Porous Cone Design. Abstract Number: 55144. 40<sup>th</sup> SICOT World Orthopaedic Congress, Muscat, Oman.
- 54. **Grau LC**, Orozco F, Griffiths S, Le D, Bianco L, Duque AF, Post Z, Ponzio D, Ong A. December 4-7, 2019. Clinical and Radiographic Outcomes: Novel Cementless Metal Backed Patella Design. Abstract Number: 55147. 40<sup>th</sup> SICOT World Orthopaedic Congress, Muscat, Oman.
- 55. **Grau LC**, Le D, Griffiths S, Duque AF, Ong A, Post Z, Ponzio D, Orozco F. December 4-7, 2019. Comparing Radiographic Outcomes of Robotic Total Knee Replacement to Manual Instrumentation. Abstract Number: 55153. 40<sup>th</sup> SICOT World Orthopaedic Congress, Muscat, Oman.
- 56. Nugent R, **Grau LC**, Ong A, Orozco F, Duque AF, Ponzio D, Post Z.December 4-7, 2019. Direct Anterior Approach is Safe for Revision Total Hip Arthroplasty. Abstract Number: 55159. 40<sup>th</sup> SICOT World Orthopaedic Congress, Muscat, Oman.
- 57. **Grau LC**, Smith E, Griffiths S, Hozack B & Ong A. Clinical and Radiographic Outcomes: Novel Cementless Metal Backed Patella Design. Presented at the *Annual Meeting of the American Association of Hip and Knee Surgeons*. Dallas, TX. November 2020.

#### **CURRENT RESEARCH**

Efficiency in Robotic Total Knee Arthroplasty with Stryker Mako. The Rothman Institute.

Stryker Cemntless Triathlon Total Knee Outcomes and Survivorship. The Rothman Institute.

Less Invasive Approaches for Total Knee Arthroplasty Outcomes and the Role of Robotic Surgery. The Rothman Institute.

Stryker Triathlon Cementless Metal Backed Patella. Survivorship and Radiographic Outcomes. The Rothman Institute.

Duracon Patella for Revision Patella Resurfacing. The Rothman Institute. (2018-Present)

StrykerTritanium Cones Clinical and Radiographic Outcomes. The Rothman Institute.

Direct Anterior Approach For Revision Total Hip Arthroplasty. The Rothman Institute.

Patellar Contact Pressures and Kinematics in the Unresurfaced Total Knee Arthroplasty; A Biomechanical Analysis of the Optetrak Logic Knee. Principal Investigator Raymond Robinson M.D. University of Miami Department of Orthoapedics

National Trends in Treatment of Femoral Neck Fractures and Associated Perioperative Complications; The Role of Total Hip Arthroplasty versus HemiArthoplasty. Principal Investigators Victor Hugo Hernadez M.D, University of Miami Department of Orthoapedics & Alvin Ong M.D, The Rothman Institute.

Independent Risk Factors for Perioperative Complications in Patients Undergoing Total or Hemi Arthroplasty Following Femoral Neck Fractures. Principal Investigators Victor Hugo Hernadez M.D, University of Miami Department of Orthoapedics & Alvin Ong M.D, The Rothman Institute.

Low-Grade Organisms in Periprosthetic Joint Infections; Prevelence, Screening, Diagnosis and Treatement. Principal Investigators Victor Hugo Hernadez M.D, Michaela Schneiderbauer M.D, MBA, University of Miami Department of Orthoapedics & Alvin Ong M.D, The Rothman Institute

Notching of the Anterior Femoral Cortex and Periprosthetic Fractures in Total Knee Arthroplasty; 3D Finite Element Modeling of Distal Femur Stress Patterns Under Load. Principal investigator Michaela Schneiderbauer M.D, MBA, University of Miami Department of Orthoapedics

Effect of Femoral Component Rotation and Sizing on Notch depth and Morphology in Total Knee Arthroplasty. Principal investigator Michaela Schneiderbauer M.D, MBA. University of Miami Department of Orthoapedics

Affect of Rotation Selection and Operator Level of Training on Accuracy of Femoral Component Sizing Using a Posterior Referencing System. Principal investigator Michaela Schneiderbauer M.D, MBA. University of Miami Department of Orthoapedics

Accuracy of Femoral Sizing in Total Knee Arthroplasty. Principal investigator Michaela Schneiderbauer M.D, MBA. University of Miami Department of Orthoapedics

Biomechanical Testing of the Synthes Variable Angle Distal Femoral Plate in Fractures with Metaphysial Communution; The Affect of a Single Locking Screw at Fracture Site on Construct Stability. Principal Investigator Fernando Vilella M.D. University of Miami Department of Orthoapedics

#### **Athletic Team Coverage**

Miami Marlins Baseball
Miami Hurricanes Baseball
Miami Hurricanes Football
Miami Hurricanes Men's Basketball
Miami Hurricanes Women's soccer
Wodapalooza Cross Fit Games
Hillel High School Football
Gulliver High School Football
Miami Country Dade High School Football

### **LANGUAGES**

Fluent – English and Spanish

### **INTERESTS**

Fitness Training, Tennis, Spear Fishing Current Affairs, Travel