

# Stanford

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## Charles Chan

Clinical Assistant Professor, Orthopaedic Surgery

### CLINICAL OFFICES

- **Pleasanton Orthopedics and Sports Medicine Clinic**

5000 Pleasanton Ave Ste 200

Pleasanton, CA 94566

**Tel** (844) 416-7846      **Fax** (925) 263-0275

- **Burlingame Orthopedics and Sports Medicine Clinic**

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- **Pediatric Orthopaedic Surgery**

730 Welch Rd 1st Fl

Palo Alto, CA 94304

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### ACADEMIC CONTACT INFORMATION

- **Academic Contact**

Patricia Siordia - Administrative Assistant to the Division of Pediatric Orthopaedics

**Email** [psiordia@stanford.edu](mailto:psiordia@stanford.edu)

**Tel** 650-723-5243

### Bio

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### CLINICAL FOCUS

- Pediatric and Adolescent Sports Medicine
- Shoulder, Elbow, Knee, and Ankle Arthroscopy
- Anterior Cruciate Ligament (ACL) Reconstruction in the Growing Athlete with Open or Closed Growth Plates
- Arthroscopic Treatment of Shoulder Instability
- Arthroscopic Treatment of Meniscus Tears
- Cartilage Preservation and Restoration
- Osteochondritis Dissecans Lesions
- Patellar Instability
- Orthopaedic Surgery

### ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Orthopaedic Surgery
- Member, Maternal & Child Health Research Institute (MCHRI)

## BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Diplomat, American Board of Orthopaedic Surgery (ABOS) (2015 - present)
- Member, Western Orthopedic Association (WOA) (2014 - present)
- Member, California Orthopaedic Association (2014 - present)
- Member, Pediatric Orthopaedic Society of North America (POSNA) (2013 - present)
- Member, American Academy of Orthopedic Surgery (AAOS) (2013 - present)
- Member, American Orthopaedic Society for Sports Medicine (AOSSM) (2012 - present)
- Member, Associate Instructor, Arthroscopy Association of North America (2011 - present)

## PROFESSIONAL EDUCATION

- Fellowship: Columbia University Dept of Orthopaedic Surgery (2013) NY
- Fellowship: University of Rochester Sports Medicine Fellowship (2012) NY
- Residency: Stony Brook Orthopaedic Surgery Residency (2011) NY
- Medical Education: Warren Alpert Medical School Brown University (2006) RI
- Board Certification: Orthopaedic Surgery, American Board of Orthopaedic Surgery (2015)
- Undergraduate, Brown University , RI (2001)

## LINKS

- The Sports Medicine Program at Stanford Children's Health: <http://sports.stanfordchildrens.org>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Chan is a dual-fellowship trained orthopaedic surgeon who specializes in the treatment of sports injuries in both the pediatric and adolescent growing athlete. His goal is to help each athlete return to their sport using both surgical and non-surgical treatments while emphasizing injury prevention.

His areas of expertise include tears to the anterior cruciate ligament (ACL) and meniscus, shoulder instability, patellar instability, cartilage defects, osteochondritis dissecans lesions, and pediatric trauma. He offers arthroscopic and open treatment options for sports injuries in athletes with either open or closed growth plates.

Dr. Chan received both his undergraduate and medical degree at Brown University. He then completed orthopaedic surgery residency at Stony Brook University Medical Center where he developed an interest in treating the growing athlete. He subsequently pursued a fellowship in Sports Medicine at the University of Rochester Medical Center and a second following in Pediatric Orthopaedics at Columbia University Medical Center Morgan Stanley Children's Hospital.

Dr. Chan's interests include identifying risk factors for growth plate injuries during ACL reconstruction, developing new strategies to prevent pediatric sports injuries, and clinical outcomes of surgical reconstructions in the pediatric athlete.

## Publications

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### PUBLICATIONS

- **THE LOWER EXTREMITY GRADING SYSTEM (LEGS) TO EVALUATE BASELINE LOWER EXTREMITY PERFORMANCE IN HIGH SCHOOL ATHLETES.** *International journal of sports physical therapy*  
Smith, J., DePhillipo, N., Azizi, S., McCabe, A., Beverine, C., Orendurff, M., Pun, S., Chan, C.  
2018; 13 (3): 401–9

- **THE LOWER EXTREMITY GRADING SYSTEM (LEGS) TO EVALUATE BASELINE LOWER EXTREMITY PERFORMANCE IN HIGH SCHOOL ATHLETES** *INTERNATIONAL JOURNAL OF SPORTS PHYSICAL THERAPY*  
Smith, J., DePhillipo, N., Azizi, S., McCabe, A., Beverine, C., Orendurff, M., Pun, S., Chan, C.  
2018; 13 (3): 401-9
- **Management of Osteochondritis Dissecans of the Femoral Condyle: A Critical Analysis Review.** *JBJS reviews*  
Chan, C. n., Richmond, C. n., Shea, K. G., Frick, S. L.  
2018; 6 (3): e5
- **A little bit faster: Lower extremity joint kinematics and kinetics as recreational runners achieve faster speeds.** *Journal of biomechanics*  
Orendurff, M. S., Kobayashi, T. n., Tulchin-Francis, K. n., Tullock, A. M., Villarosa, C. n., Chan, C. n., Strike, S. n.  
2018; 71: 167-75
- **Patellar Instability in the Skeletally Immature.** *Current reviews in musculoskeletal medicine*  
Popkin, C. A., Bayomy, A. F., Trupia, E. P., Chan, C. M., Redler, L. H.  
2018
- **Detection of Femoral Neck Fractures in Pediatric Patients With Femoral Shaft Fractures** *JOURNAL OF PEDIATRIC ORTHOPAEDICS*  
Caldwell, L., Chan, C. M., Sanders, J. O., Gorczyca, J. T.  
2017; 37 (3): E164-E167
- **Computer Modeling Analysis of the Talar Dome as a Graft for the Humeral Head** *ARTHROSCOPY-THE JOURNAL OF ARTHROSCOPIC AND RELATED SURGERY*  
Chan, C. M., LeVasseur, M. R., Lerner, A. L., Maloney, M. D., Voloshin, I.  
2016; 32 (8): 1671-1675
- **Detection of Femoral Neck Fractures in Pediatric Patients With Femoral Shaft Fractures.** *Journal of pediatric orthopedics*  
Caldwell, L., Chan, C. M., Sanders, J. O., Gorczyca, J. T.  
2016: -?
- **Effect of Preoperative Indications Conference on Procedural Planning for Treatment of Scoliosis.** *Spine deformity*  
Chan, C. M., Swindell, H. W., Matsumoto, H., Park, H. Y., Hyman, J. E., Vitale, M. G., Roye, D. P., Roye, B. D.  
2016; 4 (1): 27-32
- **Effects of Varying Locations for Biceps Tendon Tenotomy and Superior Labral Integrity on Shoulder Stability in a Cadaveric Concavity-Compression Model** *ARTHROSCOPY-THE JOURNAL OF ARTHROSCOPIC AND RELATED SURGERY*  
Chan, C. M., Behrend, C., Shields, E., Maloney, M. D., Voloshin, I.  
2014; 30 (12): 1557-1561
- **The Effect of Rod Diameter on Correction of Adolescent Idiopathic Scoliosis at Two Years Follow-Up** *JOURNAL OF PEDIATRIC ORTHOPAEDICS*  
Prince, D. E., Matsumoto, H., Chan, C. M., Gomez, J. A., Hyman, J. E., Roye, D. P., Vitale, M. G.  
2014; 34 (1): 22-28
- **Unilateral meniscomeniscal ligament.** *Orthopedics*  
Chan, C. M., Goldblatt, J. P.  
2012; 35 (12): e1815-7
- **Minocycline-Induced Bone Discoloration** *JBJS Case Connector*  
Chan, C. M., Hicks, D. G., Giordano, B. D.  
2012; 2 (3)
- **Musashi1 antigen expression in human fetal germinal matrix development** *EXPERIMENTAL NEUROLOGY*  
Chan, C., Moore, B. E., Cotman, C. W., Okano, H., Tavares, R., Hovanesian, V., Pinar, H., Johanson, C. E., Svendsen, C. N., Stopa, E. G.  
2006; 201 (2): 515-518

## PRESENTATIONS

- Computer Navigation for Placement of an All-Epiphyseal Anterior Cruciate Ligament Tunnel. - 127th Annual Meeting of the American Orthopaedic Association (June 18, 2014)

- Association Between Femoral Shaft and Ipsilateral Femoral Neck Fractures in the Pediatric Population - 2014 American Academy of Orthopaedic Surgery Annual Meeting (March 11, 2014)
- Computation Modeling to Evaluate Talar Dome Allograft for Hill-Sachs Lesions. - 33rd Arthroscopy Association of North America Annual Meeting (May 1, 2014)
- Effect of Preoperative Indications Conference on Procedural Planning for Treatment of Scoliosis. - 48th Annual Scoliosis Research Society Meeting (9/18/2013)
- Intraoperative Imaging of the Rotator Cuff Using Intravascular Ultrasound. - 30th Arthroscopy Association of North America Annual Meeting (April 14, 2011)
- Effect of Debridement of Biceps Tendon Insertion and Superior Labrum on Stability of the Shoulder Joint in a Cadaveric Concavity-Compression Model. - 32nd Arthroscopy Association of North America Annual Meeting (4/25/2013)