

# Prof. Freddie H. Fu: the man who leads the UPMC sport medicine to the world

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## Editor's note

On Nov. 9, 2018, the complex's medical building, formerly the UPMC Sports Medicine Center, was renamed to the UPMC Freddie Fu Sports Medicine Center, in recognition of Prof. Fu's contributions to the UPMC sport medicine over the past more than 30 years (*Figure 1*).

Prof. Fu, a Hong Kong native, left Hong Kong at 18 to attend Dartmouth College and moved on to University of Pittsburgh medical school. It was there he was influenced by Dr. Albert B. Ferguson Jr. to pursue a career in surgery (1). He has been serving at the University of Pittsburgh School of Medicine Faculty since 1982, with major research interests and activities in anatomic anterior cruciate ligament (ACL) reconstruction, clinical outcomes, and bioengineering of sports-related problems. As the founder of the UPMC's sports medicine program, he led it to become one of the largest, most comprehensive clinical and research programs of its kind in the world.

He is currently serving as the Chairman and Professor of the Department of Orthopaedic Surgery and head team physician of the Department of Athletics at the University of Pittsburgh. In addition to actively participating in numerous academic organizations, including the American Orthopaedic Association, Herodicus Society and Orthopaedic Research and Education Foundation (OREF), etc., he also serves as the Editor-in-Chief of our journal *Annals of Joint (AOJ)*. We are honored to have an interview with Prof. Fu to know more stories behind this honor.

## Expert introduction

Freddie H. Fu (*Figure 2*) is the David Silver Professor and Chairman of the Department of Orthopaedic Surgery, University of Pittsburgh School of Medicine. Prof. Fu specializes in Sports Medicine and holds secondary appointments as Professor of Physical Therapy, Health & Physical Activity, and Mechanical Engineering and serves as the Head Team Physician for the University of



**Figure 1** Prof. Freddie Fu's photo in front of the center.

Pittsburgh Athletic Department. In 1999, he was awarded an honorary Doctor of Science degree from Point Park University, an honorary Doctor of Public Service degree from Chatham University, and in 2010 was appointed Distinguished Service Professor by the University of Pittsburgh.

Prof. Fu graduated summa cum laude from Dartmouth College in 1974 and received his BMS in 1975 from Dartmouth Medical School. He earned his medical degree in 1977 from the University of Pittsburgh and completed his general surgery internship at Brown University. He returned to the University of Pittsburgh for an orthopaedic research fellowship and to complete his orthopaedic residency training. During that time, Prof. Fu was an AO International Fellow at the Hannover Trauma Center in Germany and an arthroscopic surgery fellow in East Lansing, Michigan. In 1984, Prof. Fu was selected as an AOA North American Traveling Fellow. As an ESSKA-AOSSM Sports Medicine Travelling Fellow in 1988, he visited over 30 sports medicine centers in Europe.

Prof. Fu's major research interest lies in anatomic ACL



**Figure 2** Freddie H. Fu.

reconstruction, clinical outcomes, and bioengineering of sports-related problems. Prof. Fu has been honored with over 260 professional awards and honors, made over 1,150 national and international presentations, co-authored 173 books chapters, is an author of over 570 peer-reviewed articles, and edited 30 major orthopaedic textbooks.

Prof. Fu is the Founding Editor of *Open Access Journal of Sports Medicine* having previously served as Editor-in-Chief. In addition, he sits on the Editorial Boards for *American Journal of Sports Medicine*, *Current Reviews in Musculoskeletal Medicine*, *European Journal of Trauma (Section Editor on Sports Injuries)*, *Isokinetics and Exercise Science*, *Journal of Dance Medicine & Science*, *Journal of Musculoskeletal Research*, *Journal of Orthopaedic Surgery (Asia Pacific Orthopaedic Association)*, *Journal of Orthopaedic Surgery and Research (Chinese Speaking Orthopaedic Society)*, *Journal of Orthopaedics and Rehabilitation*, *Knee Surgery*, *Sports Traumatology*, *Arthroscopy*, *Journal of Bone & Joint Surgery*, *Knee Surgery*, *Sports Traumatology*, and *Arthroscopy (KSSTA)*, *Open Access Journal of Sports Medicine*, *Orthopedics Today*, *Sports Medicine (International Editorial Board)*, and *OrthoEvidence*. He also serves as a reviewer for *American Journal of Sports Medicine*, *Arthroscopy*, *Bone & Joint Diseases: Index & Reviews*, *Indian Journal of Sports Traumatology and Allied Sciences*, *Journal of Orthopaedic and Sports Physical Therapy*, *Journal of Orthopaedic Research*, *Journal of Orthopaedic Techniques*, and *Knee Surgery*, *Sports Traumatology*, *Arthroscopy (KSSTA)*.

Prof. Fu oversees one of the top and most ethnically and gender-diversified orthopaedic residency training

programs in the country which attracts the best and brightest young surgeons/researchers from the US and abroad. For this, he received the 2011 American Academy of Orthopaedic Surgeons Diversity Award. In recognition of his national and international achievements, he has received the Lifetime/Honorary Membership from The European Society of Sports Traumatology, Knee Surgery and Arthroscopy, the 2014 Kappa Delta Elizabeth Winston Lanier Award from the American Academy of Orthopaedic Surgeons, the George D. Rovere Award on behalf of the American Orthopaedic Society for Sports Medicine, and most recently, the Masaki Watanabe Award on behalf of the Japanese Orthopaedic Society of Knee, Arthroscopy and Sports Medicine.

## Interview

**AOJ:** *First of all, would you like to share with us your feelings on receiving the news? What's your first thought in mind?*

**Prof. Fu:** It was certainly an honor to receive this recognition, although I did not expect such a tribute. It was very humbling but I was also quite proud because of all the excellent people who have worked in this building and at UPMC to provide excellent care to our patients over the years.

**AOJ:** *What inspired you in founding the UPMC's sports medicine program in 1986?*

**Prof. Fu:** My interest in sport medicine grew out of my own experience as an athlete, as I was on the championship basketball team at my high school (St. Paul's College) in Hong Kong. Also, my mother was a phenomenal athlete, even though girls weren't supposed to be athletic at that time. I think she gave me some of my love for sport. In any case, my mentor at the University of Pittsburgh, Dr. Albert Ferguson, encouraged me to start taking care of athletes in Pittsburgh area, from amateur to professional. Sports Medicine was not a formal discipline at that time, but was rather a philosophy about caring for people in motion... treating everyone like an athlete of sorts.

**AOJ:** *What were your aspiration by then? Did you see it growing into what it is now?*

**Prof. Fu:** My first goal then, as it is now, is to take the best

care of the patient. Part of my inspiration in formalizing the discipline of Sports Medicine was to garner increased support in the early days of UPMC for the care of athletes and the people of Pittsburgh. In fact, Sports Medicine was really the first branding of UPMC as a healthcare provider once we started taking care of local sports teams, from high school teams through professional teams.

*AOJ: Would you like to share with us the biggest challenge you've encountered in founding the program?*

**Prof. Fu:** Interestingly, the CEO of UPMC questioned why he should care about sports. But Pittsburgh is such a big sports town that I told him that sports would be the best opportunity to reach patients. Ultimately, he was very supportive of our mission despite his initial reservations. Sports medicine and the development of the Sports Medicine Center was also benefited from the early and unwavering support of Dr. Thomas Detre, then Vice Chancellor of Health Sciences, and Wesley Posvar, then Pitt Chancellor

*AOJ: What makes the UPMC Sports Medicine so successful as one of the largest, most comprehensive clinical and research programs of its kind in the world?*

**Prof. Fu:** Starting with history, we were one of the first health providers to partner with the big sports teams in town. This gave us instant visibility. But more importantly, we have worked tirelessly to attract the best orthopaedic surgeons, primary care physicians, physical therapists, athletic trainers, and researchers, all working together, to improve patient care. It truly has been the people that has made the difference.

*AOJ: Do you feel satisfied of what it is now? What would be your future expectation or plan for the UPMC Sports Medicine?*

**Prof. Fu:** I'm very proud of what we have built, but I always think there is room for improvement. Like I often say, you have to respect the past to embrace the future.

*AOJ: We know the Center is partly designed by you. What were the key concerns in your mind when doing the design in order to make the Center a state-of-the-art complex?*

**Prof. Fu:** In terms of the sports medicine clinic where we

see patients, I wanted to have physician offices and exam rooms in the same building as physical therapy so that there could be seamless transition of care for the patients and open lines of communications between physicians, trainers, and other support staff. Also, I felt strongly that the bike trail that goes from Pittsburgh to Washington DC should pass in front of the sports complex. As a result, the outdoor practice fields for the Pittsburgh Steelers and Pitt Panthers (American football) are only 80 yards in length (as opposed to full length 100 yards). But with multiple Super Bowl Championships, I think 80 yards is all we needed!

*AOJ: Compared with other sports medicine Centers, what is the exclusive feature of it?*

**Prof. Fu:** I don't know if there is one exclusive feature that sets it apart from our Sports Medicine Centers, but it was cutting edge from its inception and was a model that many places replicated around the country and world. If anything, we still seek to attract the best people to come work here and advance the field of Sports Medicine.

*AOJ: Do you have any aspiration for the future development of the center?*

**Prof. Fu:** The recent renovations of the Center now make it state of the art and hopefully will provide an even more efficient and comfortable experience for our patients. Also, we now have an equally impressive Lemieux Sports Complex just North of the city where the professional hockey team (Pittsburgh Penguins) trains alongside the many amateur hockey and skating athletes in the region.

*AOJ: You must be envied by many sport-fans for you have many chances in contacting with their idols. But only doctors know the best how difficult it is for a pro athlete in facing sports injuries. Would you like to share with us the most unforgettable story you have with your patients?*

**Prof. Fu:** I have certainly been privileged to take care of many professional and elite athletes over the years. Most recently, we performed ACL reconstruction on footballer Zlatan Ibrahimovic, who returned to top form and has played phenomenally well. But, Zlatan, like other athletes, deserves most of the credit for returning to elite level of performance because of all the rehabilitation and training they must perform. While taking care of elite athletes brings more notoriety, I'm equally committed to taking care

of all patients, from young to old.

**AOJ:** *Over the past 30+ years of your career, did you have any moment in giving up and what helped you overcome the “down” times?*

**Prof. Fu:** Practicing any career this long brings its share of highs and lows. I’m been extremely fortunate to having a loving and supporting family, wonderful mentors, and committed colleagues and friends. It is only through the help of so many others that I’ve had any such success.

**AOJ:** *You established the University of Pittsburgh's Sports Medicine Fellowship Program and inspire many physicians studying orthopaedic surgery. What would be your suggestions for young physicians?*

**Prof. Fu:** There are many lessons to be learned in practicing medicine. In Sports Medicine, there is a lot of publicity for surgeon’s taking care of elite athletes or developing “the latest and the greatest” innovations or techniques. But if I had to dispel all of my lessons down to a single suggestion, it would be the words of my mentor, Dr. Albert Ferguson, “Do the right thing. Take care of the patient and the patient will take care of you.”

### Sincere congratulations from peers

**AOJ:** *What’s image of Prof. Fu in your mind?*



**Qing Jiang, from Drum Tower Hospital, China**  
“Prof. Fu in my mind is a dynamic, never-ending climber with a few on his way.”



**Shiro Ikegawa, from RIKEN Center for Integrative Medical Sciences, Japan**  
“Kind, warm, smart, happy, energetic.”



**Dongquan Shi, from Drum Tower Hospital, China**  
“Full of energy, passion, love. World leading master in sports medicine and scientific research.”



**Carola F. Van Eck, from University of Pittsburgh Medical Center, USA**  
“When I think of Prof. dr. F. H. Fu, I think of one of the god fathers of orthopaedic sports medicine, pioneer of ACL research, phenomenal surgeon, great teacher, dedicated mentor, generous and compassionate person, family man.”



**Yuichi Hoshino, from Kobe University, Japan**  
“Dr. Fu is a ‘Jedi Master’ in Starwars who is extremely knowledgeable, knows everything and has special power and leadership.”



**Antonia Chen, from Brigham and Women’s Hospital, USA**  
“Prof. Fu is a true surgeon-scientist. He is an expert in primary and revision ACL surgery, and has perfected surgical techniques that have benefitted patients and surgeons all around the world. He has conducted research on every aspect of the ACL and has made significant contributions that have advanced the field of orthopaedics.”



**Alexis Chiang Colvin, from Mount Sinai Hospital, USA**  
e is truly one of the giants of orthopaedics. What stands out to me the most about him is that not only is he always thinking of ways to continually improve our field, but he is also incredibly devoted to his immediate family and his extended family of residents, fellows, and students.”

**AOJ:** *What do you want to say to Prof. Fu?*



**Qing Jiang, from Drum Tower Hospital, China**  
“Prof. Fu, Congratulations. You are the pride of the Chinese people. You are also the pride of all Chinese sports medicine doctors and orthopedic doctors.”





*Shiro Ikegawa, from RIKEN Center for Integrative Medical Sciences, Japan*

“Congratulations! Freddie. Keep on dragging us to the higher place!”



*Dongquan Shi, from Drum Tower Hospital, China*

“Congratulations, a great doctor. Hope he can contribute more for the world.”



*Carola F. Van Eck, from University of Pittsburgh Medical Center, USA*

“Dear Prof. Dr. F. H. Fu, when I came to Pittsburgh to join your ACL research team about 10 years ago, I was the only Dutch person, the youngest and the least experienced researcher. However, that never seemed to affect your faith in me. From the first day you involved me in very important projects and made me part of your inner circle. You offered me the same opportunities as the other foreign fellows, some of whom were already professor in their own country and had over ten years of experience as orthopedic surgeons. After six months, when I was scheduled to leave, you offered me a position as a post-doctoral research associate at the University of Pittsburgh, which enabled me to stay with you for another year. You sent me to orthopedic conferences, gave me the opportunity to meet a lot of interesting people and allowed me to assist you in writing important papers. Your objective was to teach people like me everything you know about how to improve orthopedic surgery. You set me an example for working hard to achieve a goal. I will be forever grateful to you for being a true inspiration and a key figure in establishing my career in orthopedic surgery. I went on to obtain my PhD, graduated from orthopaedic surgery residency at the University of Pittsburgh and complete a sports medicine fellowship at the prestigious Kerlan Jobe Institute. Never in my wildest dreams could I have imagined I would be working alongside with you as the junior partner in your practice. Thank you so much for all you have done for me.”



*Yuichi Hoshino, from Kobe University, Japan*

“Congratulations, Dr. Fu! Your name is now included in the world's best sports medicine facility.”



*Antonia Chen, from Brigham and Women's Hospital, USA*

“Congratulations Dr. Fu for this great honor! You have poured your heart and soul into building sport medicine at Pittsburgh. Thank you for all that you have done!”



*Alexis Chiang Colvin, from Mount Sinai Hospital, USA*

“I'm looking forward to what he is going to come up with over the next 30 years!”

## Acknowledgments

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## References

1. Dillon Carr, UPMC renames sports medicine building for Dr. Freddie Fu. Available online: <https://triblive.com/local/allegheeny/14272664-74/upmc-renames-sports-medicine-building-for-dr-freddie-fu>

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