## **Dr. Claire EGRET**

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Assistant Professor at Barry University, Florida

School of Human Performance and Leisure Studies

Doctor in Sport Sciences, option: Biomechanics and Physiology of Movement.

# **CURRENT OCCUPATION**

- → Assistant Professor at Barry University, Florida
  - Teaching: Biomechanics (SES 520), Kinesiology (SES 320, SES 320L), Nutrition (SES 330), Exercise Physiology (SES 360 , SES 360L), Qualitative Analysis in Biomechanics (SES 546)
  - Research in Biomechanics
  - Director of Thesis
  - Advisor
  - Committee member: Welfare Committee & Honors convocation Committee

#### PROFESSIONAL EXPERIENCES

- → Visiting Professor at Jacksonville State University, Alabama.
  - Teaching: Exercise Physiology (PE 400), Concepts of Wellness (PE 109), Biomechanics (PE 415) and Kinesiology (PE 362) in the Department of Health, Physical Education and Recreation
  - Teaching: French (FH 101) in the Department of Foreign Languages
- → Assistant Coach, Division I, Golf Team in the Athletics Department -Jacksonville State University, Alabama.

JSU wins Ohio Valley Conference Men's and Women's Golf Championship.

- → Research Manager for the IGC society (Intelligent Golf Concept), France www.igolfconcept.com
  - Research activities in the optimisation of the performance of the golf swing
  - Biomechanic sequence of the professional and amateur golfers
  - Use of equipment to measure the parameters of the ball and the club (Launch monitor, shaft lab...) and audiovisual software (Dartfish...)

- → Guest Lecture at Georgia State University, Georgia.
  - The biomechanics of the golf swing
  - Golf injuries
- → Assistant Professor in Sports Sciences (Attachée Temporaire d'Enseignement et de Recherche) at University of Arras, France
- → Lecturer in Sports Sciences at University of Rouen, France

### **DEGREES**

## **Degrees earned at the university**

**February 2003**, **Qualification** in order to be able to get a permanent assistant professor position at the university (Maître de Conférences) delivered by section # **74** (Physical Activity) of the Conseil National des Universités, France.

November 2002, PhD (Doctorate) in Biomechanics and Physiology of Movement, Mention très honorable avec felicitations du jury (highest grade ~ A+), University of Rouen, France.

September 1999, Master 2 (D.E.A.) in Biomechanics and Physiology of Movement, University of Rennes, France.

June 1998, Master 1 of Science (Maîtrise) in Exercise and Sport Sciences, University of Trois-Rivières UQTR (Québec) for the first semester and University of Rouen (France) for the second semester.

June 1997, Bachelor (Deug Licence) of Science in Exercise and Sport Sciences, University of Rouen, France.

### **Other degrees**

June 1994, Baccalauréat (High school graduation) série C: Mathematics and Physics

### **RESEARCH ACTIVITIES**

### Research areas

→ Master 1: « Effects of intensive sport practising on the muscle agonist/antagonist of the shoulder » Director: Pr. Martin NORMAND, Director of the Laboratory of Biomechanics. Research performed in the Department of Chiropractic, University of Trois-Rivières (Quebec).

Key words: Isokinetic, shoulder, swimming, badminton

→ Master 2: « Dynamic balance of six golfers with an optoelectronic system during the golf swing, Effect of mandibular appliance » Director: Pr. Jacques WEBER, Director of the Department of Neurophysiology, Rouen University Hospital.

Research performed in the Laboratory of gait and posture, Rouen University Hospital, Department of Neurophysiology.

Key words: Golf swing, Kinematic, Orthopedic appliance

Doctorate: "Contribution to the Optimisation of the Golf Swing: Kinematic and electromyographic analysis of the Golf Swing depending on the golfer's Level of Expertise and the Type of Club Used. Effects of augmented concomitant electromyographic feedback on the Performance" Director: Pr. Didier CHOLLET, University of Rouen, Department of Sport Sciences.

Research performed in Laboratory of gait and posture, Rouen University Hospital, Department of Neurophysiology and in collaboration with the Laboratory of Biomechanics, Department of Sport Sciences, University of Rouen, France.

Key words: Golf swing, Kinematic, Electromyography, Expertise, Golf club, Concomitant Augmented Feedback

#### Other research skills

Research tools in Biomechanics

- 3D motion analysis system (VICON)
- Force plate
- Electromyographic recording channel
- Dynamometer (Lido Active)

#### **Data processing**

- Able to work with common softwares: Word, Excel, Powerpoint.
- Able to work with statistical softwares: Statview, Statistica.
- Able to work with softwares specific to movement analysis.

#### Languages

- English: read, written, spoken.
- German.

### **PUBLICATIONS AND PRESENTATIONS**

#### Refereed scientific journals articles

- → Egret C., Nicolle B., Dujardin F., Weber J., Chollet D. (2006) Kinematic analysis of the golf swing in men and women experienced golfers. *International Journal of Sports Medicine*, 27: 463-467.
- $\rightarrow$  Egret C., Dujardin F., Weber J., Chollet D. (2004) 3-D Kinematic analysis of the golf swings of expert and experienced golfers. *Journal of Human Movement Studies*, 47: 193-204.
- → Egret C., Dujardin F., Weber J., Chollet D. (2004) Effects of Electromyographic equipment on the golf swing kinematics. *Isokinetics and Exercise Science*, 12: 199-202.
- $\rightarrow$  Egret C., Vincent O., Weber J., Dujardin F., Chollet D. (2003) Analysis of 3D kinematics concerning three different clubs in golf swing. *International Journal of Sports Medicine*, 24: 465-469.
- $\rightarrow$  Egret C., Leroy D., Loret A., Chollet D., Weber J. (2002) Effects of Mandibular Orthopedic Repositioning Appliance on kinematic pattern in golf swing. *International Journal of Sports Medicine*, 23:148-152.

#### Notes and presentations issued from congress (published in refereed scientific journals)

- → February, 14-16 (2008), Effect of skill level on kinematic and kinetic parameters during the golf swing. Egret C. SEACSM, Birmingham, Alabama, USA.
- → November, 30-31 (2003), *Influence of the club in the kinematic pattern of the golf swing : the case of the driver, the5- iron and the pitching-wedge*. Egret C., Dujardin F., Weber J., Chollet D. ACAPS, Toulouse, France.
- → November, 12-15 (2002), *Tri-dimensional analysis of the golf swing for the expert and experienced golfer*. Egret C., Toumi H., Dujardin F., Chollet D. INSEP, Paris, France.
- → June, 23-27 (2001), Eventual perturbations of kinematic pattern in golf swing with a Mandibular Orthopaedic Repositioning Appliance. Egret C., Chollet D., Weber J. Symposium of the International Society for Postural and Gait Research (ISPG), Maastricht, Netherlands.
- → November, 1-3 (2001), *Kinematic analysis of the golf swing for two skills level*. Egret C., Weber J., Chollet D. ACAPS, Valence, France.
- → May, 2-4 (2000), Etude descriptive des composantes spatio-temporelles d'un cercle au cheval d'arçons. Baudry L., Egret C., Baguelin X., Chollet D. –AFRAGA, Rennes, France.

→ May, 2-4 (2000), Projet d'étude sur l'effet de l'apprentissage par biofeedback EMG sur la stabilité d'un appui tendu renversé. Gibert S., Egret C., Baguelin X., Chollet D. –AFRAGA, Rennes, France.

#### **Conference attended**

→ Southeast American College of Sports Medicine, Charlotte NC, February 2007.

#### ACADEMIC TEACHING

→ 2007-09: Academic year, Assistant Professor at Barry University, USA

Kinesiology (Lecture & Lab), Undergraduate, SES 320 & SES 320L

Biomechanics, Graduate, SES 520

Nutrition, Undergraduate, SES 330

Exercise Physiology (Lecture & Lab), Undergraduate, SES 360 & SES 360L

Qualitative Analysis in Biomechanics, Graduate, SES 546.

→ 2006-07: Academic year, Visiting Professor at Jacksonville State University, USA

Exercise Physiology, Undergraduate, PE 400

Concepts of Wellness, Undergraduate, PE 109

Biomechanics, Undergraduate, PE 415

French, Undergraduate, FH 101

→ September 2002- August 2003, Assistant Professor at University of Sport Sciences, Arras, France

Biomechanics, Undergraduate

Anatomy, Undergraduate

→ Since september 1999, Lecturer at University of Sport Sciences, Rouen, France

Osteology, Undergraduate

Myology, Undergraduate

Nervous Anatomy, Undergraduate

Articular Biodynamic, Undergraduate

Biomechanics, Undergraduate

Statistics, Undergraduate

Scientific study of performance, Graduate

Statistics, Graduate

### **OTHER ACTIVITIES**

### **Director of graduate student**

- Benoît Nicolle *Kinematic and electromyographic analysis of the golf swing in men and women experienced golfers.* (University of Rouen, France)
- Xavier Besace *Kinematic analysis of the golf swing in expert and beginner golfers*. (University of Rouen, France)
- Perrine Bretigny *Influence of the mandibular appliance on the kinematic pattern in hockey*. (University of Rouen, France)
- Lucy Ann Ackermann A biomechanical analysis of a catcher's squat in three scenarios. (Barry University, USA)
- Lisa McDonnell *The relationship between lower extremity kinetics, spine Flexion, and erector spinae muscle Activity in competitive female rowers.* (Barry University, USA)
- Toyin Ajisafe *Force attenuation in turf soccer shoes versus traditional cleated shoes.* (Barry University, USA)

#### **Thesis Committee Member**

- Nicole Jacobs A kinematic and vertical ground reaction force analysis of skateboarders with varying years of experience performing the kickflip maneuver.
- Shayne Foley Biomechanical differences between dominant and non-dominant limbs in female soccer players during a unilateral drop landing task

### **Review scientific article referee report**

**Review of the article entitled** « Analysing of the swing hub of the golf shot » for the revue *Journal of Sports Science and Medicine* 

**Review of the article entitled** « Hip rotational velocities during the full golf swing » for the revue *International Journal of Sports Medicine* 

**Review of the article entitled** « The effects of the shortened golf backswing upon accuracy and clubhead velocity » for the revue *Journal of Science and Medicine in Sport* 

**Review of the article entitled** «Three-Dimensional knee joint kinematics during golf swing and stationary cycling after total knee arthroplasty» for the revue *Journal of Orthopedic Research* 

**Review of the article entitled** « An examination of the planar nature of golf club motion in the swings of low handicap players» for the revue *Journal of Sports Sciences* 

**Review of the article entitled «** Comparisons of center of gravity deviation and swing tempo in elite golfers » for the revue *International Journal of Sports Medicine* 

**Review of the article entitled** « The role of biomechanics in maximising distance and accuracy of golf shots » for the revue *Sports Medicine*