Board Certified Orthopaedic Spinal Surgeon Fellow of the American Academy of Orthopaedic Surgery Diplomat of the American Board of Orthopaedic Surgeons Board Certified Independent Medical Examiner

## **Illinois Spine Institute**

Schaumburg & Crystal Lake, Illinois 500 W. Golf Road Schaumburg, IL 60195 Ph: (847) 519-9700 Fax: (847) 519-9760

Email: info@ilspine.com www.ilspine.com

A specialist in Spinal Surgery, Dr. Graf's expertise focuses on caring for patients with degenerative, traumatic, neoplastic, and infectious conditions of the cervical, thoracic, and lumbar spine. Areas of research include the study of spinal fusion and the use of bone morphogenic protein. Special interests include minimally invasive spinal surgery as well as spinal fusion alternatives and motion preservation procedures.

#### **CERTIFICATION**

Board Certified Orthopaedic Spinal Surgeon - The American Board of Orthopaedic Surgery

Fellow of the American Academy of Orthopaedic Surgeons

**American Board of Independent Medical Examiners** – Board Certified Independent Medical Examiner

American Medical Association Guides to the Evaluation of Permanent Impairment, Sixth Edition – ABIME Board Certified

# **CLINICAL PRACTICE**

**Illinois Spine Institute, S.C.** – 1/2008 - Present

Greenleaf Orthopaedic Associates, S.C. – 9/2006-12/2007 - Spine and Orthopaedic Surgery

### HOSPITAL AFFILIATIONS

Alexian Brothers Medical Center – Elk Grove Village, Illinois.

St. Alexius Medical Center – Hoffman Estates, Illinois.

Northwestern Medicine Medical Center – Huntley, Illinois.

#### **EDUCATION**

OrthoIndy / Indiana Orthopaedic Hospital —Indianapolis, IN Combined Orthopaedic & Neurosurgical Spine Surgery Fellowship; 2005-2006

## **EDUCATION** (continued)

University of Illinois at Chicago – Chicago, IL Orthopaedic Surgery Residency; 2000-2005

Loyola University Stritch School of Medicine - Maywood, IL

Doctor of Medicine; 1996 - 2000

**Augustana College** – Rock Island, IL B.A. - Pre-Medicine Major; 1992 – 1996

#### UNITED STATES FOOD & DRUG ADMINISTRATION

**United States Food & Drug Administration -** Special Government Appointee. Appointed Committee Member for the Orthopaedic and Rehabilitation Devices Panel, Center for Devices and Radiological Health (CDRH), Section of the Food and Drug Administration. Responsibilities include oversight and review of orthopaedic and spinal medical devices submitted for FDA approval.

#### PROFESSIONAL ORGANIZATIONS

American Academy of Orthopaedic Surgery -Fellow and Active Member

American Board of Orthopaedic Surgeons – Diplomat and Active Member

**North American Spine Society** – Active Member

#### **HONORS & ACTIVITIES**

**AAOS 2012/2013 Spine Committee** – Nominated to the Spine Committee for the American Academy of Orthopaedic Surgeons. This includes critically evaluating spine related AAOS presentations, accepted studies, and formulating and approving spine-related course content.

 $\label{eq:miller orthopaedic Surgery Scholarship - Awarded for accomplishments in Orthopaedic Surgery \& Research \,.$ 

**Loyola University Stritch School of Medicine Surgical Honors Society** – Awarded for research and accomplishments in surgery and research at Loyola University Stritch School of Medicine

#### American Medical Association

Medical Student Section Member

Loyola University Stritch School of Medicine Delegate to the American Medical Association House of Delegates

**Central Curriculum Authority Student Representative** – Loyola University Stritch School of Medicine – Responsible for representing the student body on issues concerning the medical school curriculum.

#### RESIDENCY ACTIVITIES AND HONORS

Chief Resident – Orthopaedic Surgery, Cook County Hospital, Chicago, Illinois 2005-2006

# RESIDENCY ACTIVITIES AND HONORS – (continued)

Orthopaedic Surgery Residency Class Representative—University of Illinois at Chicago

Volunteer - American Academy of Orthopaedic Surgery Learning Center, Rosemont, Illinois

#### **RESEARCH & PUBLICATIONS**

**Epidural Steroid Injections for the Treatment of Spinal Stenosis.** Carl N Graf MD, Richard Lim MD. Senior Thesis; University of Illinois at Chicago, Dept of Orthopaedic Surgery, 6/2005.

Carl N Graf, MD, David Schwartz, MD. Book Chapter 25: Lateral Compression Injuries of the Cervical Spine. In: Cervical Spine Trauma. A Vaccaro, et al. Rothman, 2010. Page 403.

A Sheep Study Comparing Two Different Preparations of rhBMP-2 to Autograft in an Instrumented Lumbar Corpectomy and Spinal Reconstruction Model. ABSTRACT NO: 339. Presented at the 2007 Congress of Neurological Surgeons Annual Meeting.

A Sheep Study Evaluating Fusion Rates Using Autograft in an Instrumented Lumbar Corpectomy Spinal Reconstruction Model. ABSTRACT NO: 377. Presented at the 2007 Congress of Neurological Surgeons Annual Meeting.

A Sheep Study Evaluating Fusion Rates Using rhBMP-2 in a Morselized Absorbable Collagen Sponge (ACS) Carrier Combined with Resorbable Ceramic Granules in an Instrumented Lumbar Corpectomy Spinal Reconstruction Model. ABSTRACT NO: 438. Presented at the 2007 Congress of Neurological Surgeons Annual Meeting.

A Sheep Study Evaluating Fusion Rates Using rhBMP-2 in a Compression Resistant Matrix (CRM) carrier in an Instrumented Lumbar Corpectomy Spinal Reconstruction Model.

ABSTRACT NO: 457. Presented at the 2007 Congress of Neurological Surgeons Annual Meeting.

Can Recombinant Human Bone Morphogenetic Protein Be Used Successfully with Femoral Ring Allografts for Standalone Anterior Lumbar Interbody Fusion? A Quantitative Computed Tomography Study. ABSTRACT NO: 466. Presented at the 2007 Congress of Neurological Surgeons Annual Meeting.

A Sheep Study Comparing Two Different Preparations of rhBMP-2 to Autograft in an Instrumented Lumbar Corpectomy and Spinal Reconstruction Model' Indiana Orthopaedic Society. Presented at the Indiana Orthopaedic Society. April 28,2007.

Can Recombinant Human Bone Morphogenetic Protein Be Used Successfully with Femoral Ring Allografts with Standalone Anterior Lumbar Interbody Fusions? A Quantitative Computed Tomography Study. Presented at the Indiana Orthopaedic Society. April 28, 2007.

A Sheep Study Comparing Two Different Preparations of rhBMP-2 to Autograft in an Instrumented Lumbar Corpectomy and Spinal Reconstruction Model. Podium presentation at the Basic Science Focus Forum of the Orthopaedic Trauma Association's Annual Meeting, October 17-18, 2007, at the Hynes Convention Center in Boston, Massachusetts, USA.

A Sheep Study Comparing Two Different Preparations of rhBMP-2 to Autograft in an Instrumented Lumbar Corpectomy and Spinal Reconstruction Model. Poster presentation at the 23rd Annual Meeting of the Orthopaedic Trauma Association, October 18-20, 2007 at the Hynes Convention Center in Boston, Massachusetts, USA.

## **RESEARCH & PUBLICATIONS – (continued)**

Adolescent Idiopathic Scoliosis, Instrumentation Type and Post-Op Progression. Carl N Graf MD, Jason Zook MD. Presented at the UIC Clinical Research Conference 6/2004.

**An Orthopaedic Review: Nickel Allergy Associated with Implanted Hardware** – Carl N Graf, William Hopkinson MD , Stephen Rabin MD. Loyola Orthopaedic Journal 2000; Vol IX, Pgs. 16-21.

**Poster Presentation: Nickel Allergy Associated with Implant Hardware** – Carl N Graf MD, Stephen Rabin MD, William Hopkinson MD. Advances in Surgery National Conference 2001.

**Immune Response to Implants**. Rabin SI, Graf CN, Hopkinson WJ, Hallab NJ.eMedicine from WebMD. Updated January 08, 2009.

Available at: <a href="http://emedicine.medscape.com/article/1230696-overview">http://emedicine.medscape.com/article/1230696-overview</a>

**Locked Volar Distal Radius Plating – Clinical and Radiographic Outcomes** – Carl N Graf MD, David Bierbrauer, MD Alfonzo Mejia, MD. Presented at the UIC Clinical Research Conference 6/2002.

Management of Open Fractures of the Hand – Carl N Graf, MD, Mark Gonzalez, MD, et al. Journal of the American Society for Surgery of the Hand, Vol 3, #4; Nov 2003.

Clinical Results of Hybrid Meniscal Repair. Carl N Graf MD, Dennis Park MD, Mark Hutchinson MD. Presented at the UIC Clinical Research Conference, 6/2003.

Book Chapter: Mutilating Injuries of the Hand: Picking Up the Pieces. J Weinzweig, et al. Chapter: Ulnar Mutilating Injuries, Mark H Gonzalez MD, Carl N Graf MD, et al. Elsevier Health Science, February 2005, Pgs. 87-99.

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