

## **CURRICULUM VITAE**

**Paul L. Asdourian, M.D.**  
**3333 N. Calvert Street, Suite 400**  
**Baltimore, Maryland 21218**  
Office (410) 554-2867 Fax (410) 554-2917

2008 - Current

**MEDSTAR HEALTH**  
*Baltimore, Maryland*

1987-2008

**GREATER CHESAPEAKE ORTHOPAEDIC ASSOCIATES**  
*Baltimore, Maryland*

1986-1987

**RUSH MEDICAL COLLEGE**  
*Rush Presbyterian-St. Luke's Medical College*  
*The Shriner's Hospital for Crippled Children*  
*Chicago, Illinois*  
*Director: Ronald L. DeWald, M.D.*  
*Fellowship - Orthopaedic Spine Surgery*

1982-1986

**BOSTON UNIVERSITY MEDICAL CENTER**  
*Boston, Massachusetts*  
*Chairman: Robert E. Leach, M.D.*  
*Residency - Orthopaedic Surgery*

1981-1982

**LENOX HILL HOSPITAL**  
*New York, New York*  
*Internship - General Surgery*

### **EDUCATION**

1977-1981

**STATE UNIVERSITY OF NEW YORK**  
**HEALTH SCIENCE CENTER**  
*Syracuse, New York*  
*Doctor of Medicine - May 17, 1981*

1973-1977

**STATE UNIVERSITY OF NEW YORK AT STONY BROOK**  
*Stony Brook, New York*  
*Bachelor of Science - Biochemistry*

1970-1973

**STUYVESANT HIGH SCHOOL**  
*New York, New York*

### **BOARD CERTIFICATION:**

Orthopaedic Surgery

American Board of Orthopaedic Surgeons - 1989, Recertified 1998, 2009

### **STATE LICENSES:**

Maryland since 1987

Florida since 2011

### **PROFESSIONAL APPOINTMENTS**

2015- Present **Director Medstar Spine Program, Central Maryland Region**  
*Baltimore, Maryland*

1987-2015 **Chief - Orthopaedic Spine Surgery**  
*Medstar Union Memorial Hospital*  
*Baltimore, Maryland*

1988-Present **Clinical Instructor - Orthopaedic Surgery**  
*Johns Hopkins University School of Medicine*  
*Baltimore, Maryland*

### **MEDICAL SOCIETIES**

1991-Present Maryland Orthopaedic Society

1991-Present American Academy of Orthopaedic Surgeons

1992- Present ISASS

1992-Present North American Spine Society

1992-Present Scoliosis Research Society

### **COMMITTEES**

Co Chair Spine Subcommittee MedStar North-Present

Performance Evaluation Committee-Present

MedStar Union Memorial Hospital Orthopaedic Surgical Policy Committee-Present

MedStar Union Memorial Hospital Surgical Policy Committee- Past

Helixcare Practice Guideline Committee Chairman- Past

Maryland Orthopaedic Association Board of Directors:

1997 Secretary/Treasurer

1998 President-Elect

1999 President

## HONORS AND AWARDS

- 1973 National Honor Society  
*Stuyvesant High School*
- 1973 Regents Scholarship Certificate  
*State University of New York*
- 1977 High Honors in Biochemistry  
*Stuyvesant High School*
- 1977 Hammer Throw Record Holder
- 1977-1981 Calouste Gubenkian Scholarship
- 1978 Gold Medal Award  
*Armenian Benevolent Union*
- 1981 Alpha Omega Alpha  
*State University of New York Health Science Center*
- 1992 “Top Doc” Award for Orthopaedic Surgery  
*Baltimore Magazine*
- 1995 “Top Doc” Award for Orthopaedic Spine Surgery  
*Baltimore Magazine*
- 1996-1997 Honored Professional  
Who’s Who in Executives and Professionals
- 1998 “Top Doc” Award for Orthopaedic Surgery  
*Baltimore Magazine*
- 1999 *President of Maryland Orthopaedic Association*
- 1999 State of Maryland, Governor’s Citation, Member of Technical  
Work Group, Acute Low Back Pain
- 2002 Outstanding paper award NASS  
The Effect of Spinal Instrumentation Particulate Wear Debris  
-An In-Vivo Rabbit Model and applied Clinical Study of  
Retrieved Instrumentation Cases-
- 2007 “Top Doc” Award for Orthopaedic Spine Surgery  
*Baltimore Magazine*
- 2009 “Top Doc” Award for Orthopaedic Spine Surgery  
*Baltimore Magazine*

### **Honors and Awards Continued**

- 2010            *"Top Doc" Award for Orthopaedic Spine Surgery  
Baltimore Magazine*
- 2013            *"Top Doc" Award for Orthopaedic Spine Surgery  
Baltimore Magazine*
- 2014            *"Top Doc" Award for Orthopaedic Spine Surgery  
Baltimore Magazine*
- 2015            *"Top Doc" Award for Orthopaedic Spine Surgery  
Baltimore Magazine*
- 2016            *"Top Doc" Award for Orthopaedic Spine Surgery  
Baltimore Magazine*

### **PRESENTATIONS**

"The Natural History of the Vertebral Breast Metastasis", Asdourian, P., Weidenbaum, M., Hammerberg, K., DeWald, R.: The Scoliosis Research Society. Vancouver, Canada, September 18, 1987.

"Vertebral Apophyseal Ring Fracture: A Salter Three Fracture", Weidenbaum, M., Parisien, M., Rodts, M., Asdourian, P., Hammerberg, K., DeWald, R.: American Academy of Orthopaedic Surgeons Annual Meeting. Atlanta, Georgia, 1987.

"An Evaluation of Spinal Deformity in Metastatic Breast Center", Asdourian, P., Mardjetko, S., Weidenbaum, M., Hammerberg, K., DeWald, R.: The Scoliosis Research Society. Baltimore, Maryland, September 1988.

"Indications for Anterior Instrumentation in Tumors with Particular Emphasis on MRI Visualization", Asdourian, P.: The Kaneda Anterior Spinal Device Instrumentation Introductory Course. Towson, Maryland, February, 1990.

"Injured Worker's Rehabilitation", Asdourian, P.: Joint Task Force on Injured Worker's Rehabilitation. Catonsville, Maryland, June, 1990.

"Issues of the Spine", Asdourian, P.: Maryland Academy of Family Physicians. Baltimore, Maryland, January, 1991.

"Metastatic Spine Instability", Asdourian, P.: The Southern Medical Association 85- Annual Assembly Atlanta, Georgia, November, 1991.

"Infections of the Spine", Asdourian, P.: Current Concepts in Orthopaedics: Southern Orthopaedic Association. Baltimore, Maryland, April, 1992.

### **Presentations continued**

“The Diagnosis and Treatment of the Space Challenged Nerve Root”, Asdourian, P.: Current Concepts in Orthopaedics: Southern Orthopaedic Association. Baltimore, Maryland, May, 1994.

“The Diagnosis and Treatment of Lumbar Spine Degenerative Spondylolisthesis”, Asdourian, P.: Current Concepts in Orthopaedics: Southern Orthopaedic Association. Baltimore, Maryland, May, 1995.

“Update on Spinal Fusion”, Asdourian, P.: State of Maryland Disability Examiners. Baltimore, Maryland, January, 1999.

Moderator, Maryland Orthopaedic Association Annual Scientific Meeting, April 10, 1999.

“Lumbosacral Spine Disorder”, Asdourian, P.: Orthopaedic Review Course, Johns Hopkins University School of Medicine, Office of Continuing Education. Baltimore, Maryland, June 22, 1999.

“Spinal Surgery - The Truth About What Work”, Asdourian, P.: Chesapeake Association of Rehabilitation Professionals in the Private Sector(CARPPS). Columbia, Maryland, November 4, 1999.

Moderator, Maryland Orthopaedic Association Annual Scientific Meeting, April 8, 2000.

“The Natural History of Spinal Metastases”, Asdourian, P.: First Annual Regional Spine Conference, Anne Arundel Medical Center, Annapolis, Maryland, April 28, 2000.

“Lumbosacral Spine Disorders”, Asdourian, P.: Orthopaedic Review Course, Johns Hopkins University School of Medicine, Office of Continuing Education. Baltimore, Maryland, June 9, 2000.

“Lumbosacral Spine Disorders”, Asdourian, P.: Orthopaedic Review Course, Johns Hopkins University School of Medicine, Office of Continuing Education. Baltimore, Maryland, June 23, 2003.

“New Procedures for Back Injuries - Do they Work?” Asdourian, P.:  
19<sup>th</sup> Annual MWCEA Conference, Ocean City, Maryland, September 23, 2003

“East Coast Spine Challenges”, Asdourian, P: San Diego City Wide Spine Conference, San Diego, California, May 20, 2004.

“Orthopaedic view on Non-Surgical Back Patients”, Asdourian, P: 2006 CARRPS Spring Educational Seminar, Pikesville Maryland, April 27, 2006.

“Advances in Orthopaedic Intervention of the Spine”, Asdourian, P: 2006 American Physical Therapy Association of Maryland, Union Memorial Hospital Baltimore, Maryland, 10/18/2006

### **Presentations continued**

“Degenerative Disc Disease: Old and New Treatment Options”, Asdourian, P: Medical Grand Rounds, Union Memorial Hospital Baltimore, Maryland 02/08/2007.

“Implant options in the 21<sup>st</sup> Century”. Asdourian, P: TOPS Baltimore Spine Society Meeting Baltimore, Maryland June 26, 2007.

“Medical Imaging-Is A Picture Worth a Thousand Procedures?” Asdourian, P: 23<sup>rd</sup> Annual MWCEA Conference, Ocean City Maryland. September 23-26, 2007.

### **ABSTRACTS, POSTERS, AND OTHER PRESENTATIONS**

Rushton, S.A., Marzluff, J. M., Lindley, J., Tomaras, C., Morrison T., McConnell, J., Asdourian, P., Pak, S., Hellbusch, L., Bowdino, B., Long, D.: Is Cervical TDR Affecting Cervical Lordosis?: A Radiographic Analysis. P163. Spine Arthroplasty Society Meeting, 2007.-Poster

Rushton, S.A., Marzluff, J. M., Lindley, J., Tomaras, C., Morrison T., McConnell, J., Asdourian, P., Pak, S., Hellbusch, L., Bowdino, B.: One Year Clinical Outcomes Using a Cervical Artificial Disc Versus Anterior Cervical Discectomy and Fusion in a Prospective Randomized Study. P164. Spine Arthroplasty Society Meeting, 2007.-Poster

Rushton, S.A., Marzluff, J. M., Lindley, J., Tomaras, C., Morrison T., McConnell, J., Asdourian, P., Pak, S., Hellbusch, L., Bowdino, B.: Is the First Five the Worst Five?: A Critical Analysis of the Learning Curve in Cervical TDR. P166. Spine Arthroplasty Society Meeting, 2007.-Poster

McConnell, J., Highsmith, J., Marzluff, J., Tomaras C., Morrison, T., Stevenson, K., Volcan, I., Goodrich, A., Asdourian, P.: SECURE-C Cervical Disc Arthroplasty: One and Two Year Clinical Results. P104. Spine Arthroplasty Society Meeting, 2008.-Poster

Highsmith, J., Marzluff, J., Tomaras C., Morrison, T., Stevenson, K., Volcan, I., Goodrich, A., Asdourian, P.: Radiographic Analysis of SECURE-C Cervical Disc Arthroplasty at One and Two Year Post-op. P110. Spine Arthroplasty Society Meeting, 2008.-Poster

McConnell, J., Marzluff, J., Highsmith, J., Tomaras C., Morrison, T., Volcan, I., Goodrich, A., Asdourian, P.: Two Year Clinical Outcomes from the SECURE-C Cervical Artificial Disc IDE. 571. Spine Arthroplasty Society Meeting, 2009.-Poster

Marzluff, J., Highsmith, J., Tomaras C., Morrison, T., Volcan, I., Goodrich, A., Asdourian, P.: Clinical Motion in the Cervical Spine. 575. Spine Arthroplasty Society Meeting, 2009.-Poster

## **Abstracts continued**

McConnell, J., Marzluff, J., Tomaras, C., Volcan, I., Goodrich, A., Peppelman Jr, W., Beutler, W., Asdourian, P., Baker, K.: A Clinical Comparison of a Cervical Artificial Disc and Anterior Cervical Discectomy and Fusion in a Prospective Randomized Trial: Two-Year Follow-Up. P148. North American Spine Society, 2009.-Poster

McConnell, J., Marzluff, J., Highsmith, J., Tomaras C., Morrison, T., Volcan, I., Goodrich, A., Asdourian, P.: SECURE-C Cervical Artificial Disc IDE: Two Year Clinical Outcomes. 352. Spine Arthroplasty Society Meeting, 2010.-Poster

Pimenta, L., Hes, R., Hamzaoglu, A., McAfee, P., Anekstein, Y., Cappuccino, A., Coric, D., Comey, C., Banco, R., Robbins, S., Geisler, F., Slosar, P., Schwartz, A., Girasole, G., Ullrich, P., Yue, J., Regan, J., Khoo, L., Laurysen, C., Miles, J., Asdourian, P., Gill, K., Small, J.: Treatment of Lumbar Stenosis with a Total Posterior Arthroplasty Prosthesis versus Posterior Lumbar Fusion: A Prospective Report on 145 Patients. 415. Spine Arthroplasty Society Meeting, 2010.-Poster

Butler, J., Asdourian, P., Schwartz, A., Felt, J.: Clinical Performance Evaluation of a Modular Interbody Fusion Device. 2010 Annual SMISS Meeting, Miami Florida. November 5-7, 2010.

Asdourian, P., Norton, B., Felt, J.: Preclinical Evaluation of a Modular Structural Nucleus Replacement System. 2010 Annual SMISS Meeting, Miami Florida. November 5-7, 2010.

Beutler, W., Peppelman, W., Marzluff, J.M., Tomaras, C., Volcan, I., Asdourian, P., McConnell, J., Baker, K., Myer, J.: A Prospective, Randomized, Pivotal Study of the SECURE- C Cervical Artificial Disc: Two year Outcomes. 2011 SAS Meeting, Las Vegas Nevada. April 26-29, 2011.

P. de Muelenaere, P. Asdourian, A. Schwartz, J. Felt: Novel Modular Disc Nucleus Prosthesis: Bench Data and Early Clinical Results. VTI Vertebral Technologies. International Society for the Advancement of Spine Surgery (ISASS13) 13<sup>th</sup> Annual Conference, Vancouver, BC Canada, April 3-5, 2013 --Poster

W.J. Beutler, W.C. Peppelman, J. Marzluff, C. Tomaras, I. Volcan, p. Asdourian, K. Baker, J. Myer,: SECURE-C Cervical Artificial Disc IDE Clinical Trial: Outcomes at Two and Five Years. International Society for the Advancement of Spine Surgery (ISASS13) 13<sup>th</sup> Annual Conference, Vancouver, BC Canada, April 3-5, 2013

J. McConnell, J. Highsmith, I. Volcan, P. Asdourian, K Baker, J Myer, D. Mckee:  
SECURE –C Cervical Artificial Disc IDE Study: Outcomes at Five and Six Years. International Society for the Advancement of Spine Surgery (ISASS14) - 14th Annual Conference, April 30 -May 2, 2014 - Miami, Florida, USA --Abstract

P. de Muelenaere, J. Hurlbert, P. Asdourian, A Schwartz, J. C. Felt:  
Initial Results of a Multi-Center Study of the InterCushion Disc Nucleus Replacement. International Society for the Advancement of Spine Surgery (ISASS14) - 14th Annual Conference, April 30 -May 2, 2014 - Miami, Florida, USA - Poster

## PUBLICATIONS

Movva, N.R., Katz, E., Asdourian, P.L., Hirota, Y., Inouye, M.: Gene Dosage Effect of the Structural Gene for a Lipoprotein of the Escherichia Coli Outer Membrane. J. Bacteriol. 133:81-84, 1978.

Asdourian, P., Parker, B., Paskanik, A.: Interpericardial Adhesions: Studies Utilizing a New Animal Model. American Journal of Surgery. Submitted for Publication.

Asdourian, P., Swainson, C.: Orthopaedic Treatment of Common Injuries: The Pelvis in Noble. 3.(ed.) Textbook of General Medicine and Primary Care. Boston/Toronto, Little, Brown and Co., 241-244, 1987.

Asdourian, P., Mardjetko, S., Rauschnig, W., Johnson, H., Hammerberg, K., DeWald, R.: An Evaluation of Spinal Deformity in Metastatic Breast Cancer. J.Spinal Disorders 3: 119-134, 1990.

Asdourian, P., Weidenbaum, M., Hammerberg, K., DeWald, R., Ramsey, R.: The Pattern of Vertebral Involvement in Metastatic Vertebral Breast Cancer. Clinical Orthopaedics. 250: 164-170, 1990.

Asdourian, P.: Metastatic Disease of the Spine. In Textbook of Spinal Surgery. Bridwell K.H., DeWald, R.L. (eds). Philadelphia, Lippincott, 1187-1241, 1991

Wasilewski, S.A., Asdourian, P.L.: Bilateral Chronic Exertional Compartment syndromes of Forearm in an Adolescent Athlete. Am. J Sports Medicine 19:665-667, 1991.

Holder, L., Machin, J., Asdourian, P., Links, J., Sexton, C.: Planar and High Resolution SPECT Bone Imaging in the Diagnosis of Facet Syndrome. The Journal of Nuclear Medicine. 36: 37-44, 1995.

Asdourian, P.: Metastatic Disease of the Spine. In Textbook of Spinal Surgery. Bridwell, K.H., DeWald, R.L. (eds). 2<sup>nd</sup> Edition. Philadelphia, Lippincott-Raven Publishers, 1996.

McConnell, J., Marzluff, J.; Asdourian, P.; et al.: A Clinical Comparison of a Cervical Artificial Disc and Anterior Cervical Discectomy and Fusion in a Prospective Randomized Trial: Two Year Follow-up. The Spine Journal. 9: 190s-191s, 2009.

Henderson, C.; Asdourian, P.: Facet Joint Replacement for the Treatment of Degenerative Disc Disease of the Spine. Arthritis and Arthroplasty: The Spine. Shen, F.H.; Shaffrey, C.I. (eds). Philadelphia, Saunders, 365-372, 2010.

McConnell J, Marzluff JM, Volcan I, Asdourian PL, McKee D, Myer J, Baker K. SECURE®-C cervical artificial disc IDE study: outcomes at five years. Spine J 13[9 Suppl], S93-S94. 2013.



<b>First Name:</b>	Paul	<b>MI:</b>	L	<b>Last Name:</b>	Asdourian
<b>Present Position:</b>	Orthopaedic Surgeon Specializing in Disorders of the Spine				
<b>Medical School Name:</b>	State University of New York Up State Medical Center				
<b>Degree Awarded:</b>	MD	<b>Year Completed:</b>	1981		
<b>Graduate Medical Education (including internships, residencies and fellowships):</b>					
<b>Program Name</b>	<b>Specialty/Field</b>		<b>Date From:</b>	<b>To:</b>	
Rush Medical Center Fellowship	Orthopaedic Spine Surgery		1986	1987	
Boston University Medical Center Residency	Orthopaedic Surgery		1982	1986	

Certification and Re-Certification Information			Current Licensure Data	
Specialty	Certification Year	Re-Certification Year	State	Date of Expiration
Orthopaedic Surgery	1989	1998	MD	09/30/2010

Academic Appointments - List the past ten years, beginning with your current position.		
Start Date	End Date	Description of Position(s)
1987	Present	Chief of Spine Surgery Union Memorial Hospital
1987	Present	Instructor, Part-Time John Hopkins University

**Concise Summary of Role in Program:**  
 Treatment of Disorders of the Spine  
 GME Training of Union Memorial Residents

**Current Professional Activities / Committees (Limit of 10 in the last 5 years):**  
 Union Memorial Hospital Surgical Policy Committee  
 Union Memorial Hospital Orthopaedic Surgical Policy Committee

**Selected Bibliography - Most representative Peer Reviewed Publications / Journal Articles from the last 5 years (limit of 10):**  
 Metastatic Disease of the Spine- In Textbook of Spinal Surgery 2nd Edition 1996  
 High Resolution Spect Bone Imaging  
 Metastatic Disease of the Spine  
 The Pattern of Vertebral Involvement in Metastatic Vertebral Breast Cancer  
 An Evaluation of Spinal Deformity in Metastatic Breast Cancer

**Selected Review Articles, Chapters and/or Textbooks (Limit of 10 in the last 5 years):**

**Participation in Local, Regional, and National Activities / Presentations/ Abstracts/ Grants (Limit of 10 in the last 5 years):**  
 Global Symposium on Motion Preservation Technology  
 Medical Imaging is a Picture Worth a Thousand Procedures  
 Secure-C Artificial Disc Replacement  
 Implant options in the 21st Century  
 Is Cervical TDR Affecting Cervical Lordosis  
 Is the First five the worst five? A critical Analysis of the learning Curve in Cervical TDR  
 One Year Clinical out comes using A Cervical Artificial Disc Versus Anterior Cervical Discectomy and Fusion in a Prospective Randomized Study  
 Degenerative Disc Disease: Old and New Treatment options

**If not board certified, explain equivalent qualifications for RC consideration:**