
HOWARD D. ROUTMAN

DO, FAOAO, FAAOS - Shoulder Reconstruction

PROFESSIONAL SUMMARY

Board certified orthopedic surgeon specializing in shoulder reconstruction in the Palm Beaches with over two decades of experience in orthopedic surgery. Committed to advancing healthcare through expertise in medical education, advanced surgical techniques, and focus on innovative surgery solutions, currently leading as Director of Palm Beach Shoulder Service and Program Director of the HCA JFK Hospital/ University of Miami GME Consortium Orthopedic Surgery Residency Program.

EMPLOYMENT HISTORY

DIRECTOR – PALM BEACH SHOULDER SERVICE <i>Atlantis Orthopaedics – A Division of South Florida Orthopedics and Sports Medicine</i>	May 2024 - Present <i>Palm Beach Gardens, FL</i>
PROGRAM DIRECTOR - ORTHOPEDIC SURGERY RESIDENCY PROGRAM <i>University of Miami/ HCA JFK Hospital GME Consortium</i>	May 2024 - Present <i>Lake Worth, FL</i>
ORTHOPEDIC SURGEON - SHOULDER RECONSTRUCTION <i>Atlantis Orthopaedics – A Division of South Florida Orthopedics and Sports Medicine</i>	May 2024 - Present <i>Palm Beach Gardens, FL</i>
ORTHOPEDIC SURGEON - SHOULDER RECONSTRUCTION <i>HCA Florida Atlantis Orthopedics</i>	Mar 2020 - May 2024 <i>Palm Beach Gardens, FL</i>
ORTHOPEDIC SURGEON - SHOULDER RECONSTRUCTION <i>Atlantis Orthopaedics</i>	May 2006 - Mar 2020 <i>Palm Beach Gardens, FL</i>
PRESIDENT <i>The Orthopedic Foundation</i>	Mar 2020 - May 2024 <i>Atlantis, FL</i>

EDUCATION

ASES FELLOWSHIP IN SHOULDER RECONSTRUCTION <i>The Hughston Clinic and Sports Medicine Foundation</i> Awarded the Revere Cup for excellence in clinical research on the rotator cuff deficient arthritic shoulder	Aug 2000 - Jul 2001 <i>Columbus, GA</i>
RESIDENCY IN ORTHOPAEDIC SURGERY <i>Philadelphia College of Osteopathic Medicine</i> Chief Resident 1999-2000	Jul 1996 - Jun 2000 <i>Philadelphia, PA</i>
INTERNSHIP - TRADITIONAL ROTATING <i>Ohio University College of Osteopathic Medicine, Doctors Hospital</i>	Jun 1995 - Jul 1996 <i>Columbus, OH</i>
DOCTOR OF OSTEOPATHIC MEDICINE <i>Nova Southeastern University College of Osteopathic Medicine</i> Summa Cum Laude graduate	Aug 1991 - May 1995 <i>Davie, FL</i>
BACHELOR OF ARTS IN SOCIOLOGY <i>The University of Florida</i>	Jun 1987 - Aug 1991 <i>Gainesville, FL</i>

SKILLS

Shoulder Surgery, Arthroplasty, Orthopedic Surgery, Joint Replacement, Clinical Research, Medical Education, Surgical Techniques, Patient Care, Healthcare Leadership, Surgical Innovation, Rehabilitation.

LINKS

Website: www.myshoulderspecialist.com.

HOBBIES

- ◆ Travel, Golf, Wine, Cooking, Music, Computer Technology
- ◆ WSET Level 2 Certified Wine and Spirit Educational Trust (2015)
- ◆ Previous keyboard player and vocalist in 'DNR' Band, a band comprised of physicians playing charity and fundraising events

APPOINTMENTS/ MEMBERSHIPS/ CERTIFICATIONS

MEDICAL DIRECTOR

2022-Present

The Orthopedic Institute at HCA Florida JFK Hospital, *Atlantis, FL*

SURGEON ADVISORY BOARD

2022-Present

Exactech, Shoulder Product Line; Member

EUROPEAN SOCIETY FOR SURGERY OF THE SHOULDER AND ELBOW

2019-Present

Société Européenne pour la Chirurgie de l'Epaule et du Coude; Member

AMERICAN SHOULDER AND ELBOW SURGEONS

2015-Present

www.ascs-assn.org

Active Member (2015-Present), Grants Committee (2020-2025), Chairman of the Abstract Review Committee (2022-2023), Membership Committee (2017-2022), Associate Member (2013-2015)

INTERNATIONAL SOCIETY FOR TECHNOLOGY IN ARHTROPLASTY

2013-Present

Member

INVESTIGATOR

2010-Present

An Open Label, Multicenter, Retrospective and Prospective Evaluation of Shoulder Arthroplasty Clinical and Radiographic Outcomes, *WIRB #CR09-005/ Protocol #20091701*

ASSOCIATION OF CLINICAL ELBOW AND SHOULDER SURGEONS (ACCESS)

2009-Present

www.access.co

Active Member (2009-Present), President (2015-2016), Vice President (2014-2015), Secretary (2013-2014), Executive Board Member (2012-2017)

THE PALM BEACH SHOULDER & SPORTS MEDICINE FOUNDATION

2006-Present

Founder, President

BOARD CERTIFIED ORTHOPAEDIC SURGEON

2003-Present

Recertified 2013, Continuous recertification 2023

EXACTECH CLINICAL EVALUATOR

2006-Present

Primary and Reverse Shoulder Replacement, Equinoxe Shoulder Arthroplasty

HUGHSTON SOCIETY

2001-Present

Member

AMERICAN OSTEOPATHIC ACADEMY OF ORTHOPAEDICS

2000-Present

Member

VICE CHIEF OF STAFF

2024-2025

Held position at HCA Florida JFK Hospital in Atlantis, FL and HCA Florida JFK Hospital North Campus in West Palm Beach, FL

CHAIR MEMBER OF THE CREDENTIALS COMMITTEE

2024-2025

Combined medical staff at HCA Florida JFK Hospital and HCA Florida JFK Hospital North Campus facilities

CORE FACULTY MEMBER OF THE ORTHOPEDIC SURGERY RESIDENCY PROGRAM

2022-2024

HCA Florida JFK Hospital

University of Miami Miller School of Medicine Consortium

AMERICAN OSTEOPATHIC ACADEMY OF ORTHOPEDICS

2015-2017

Positions held over the shoulder and elbow sector: President (2016-2017), Vice President (2015-2016)

CREDENTIALS COMMITTEE

2007-2012

Columbia Hospital, *West Palm Beach, FL*

THE PALM BEACH CHAPTER OF THE AMERICAN RED CROSS

2002-2007

Director

AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

2010-present

Fellow

2005

Associate Member

AMERICAN OSTEOPATHIC ACADEMY OF ORTHOPAEDICS

2005

Fellow

AMERICAN OSTEOPATHIC BOARD OF ORTHOPAEDIC SURGERY

2005

Clinical Examiner

FLORIDA INTERNATIONAL UNIVERSITY

2005

Clinical Associate Professor, Department of Orthopedic Surgery Florida International University Herbert Wertheim College of Medicine

NOVA-SOUTHEASTERN UNIVERSITY

2024-present

Clinical Assistant Professor, Orthopedic Surgery Kiran Patel College of Allopathic Medicine

2004

Clinical Associate Professor, College of Osteopathic Medicine Department of Surgery

CO-INVESTIGATOR FOR ENCORE REVERSE SHOULDER PROSTHESIS

2003-2004

Encore Reverse Shoulder Prosthesis for the Treatment of Complex Glenohumeral, *FDA IDE# G020193*

DESIGN SURGEON

Exactech

Equinox Shoulder Platform Fracture Reverse Shoulder Replacement, Platform Fracture Stem and Proximal Humeral Fracture Plate

SAN DIEGO SHOULDER INSTITUTE (SAN DIEGO SHOULDER COURSE)

2017-present

Course Co-Chair (2025), Planning Committee (2021-2022), Faculty (2017-present)

ADVANCED SHOULDER ARTHROPLASTY MEETING

2019-present

Scientific Committee (2019-2022, 2026), Faculty (2019-present)

LICENSED PHYSICIAN

Florida

OTHER ASSOCIATIONS

American Osteopathic Association

Florida Osteopathic Medical Association

Florida Medical Association

Florida Orthopaedic Society

Eastern Orthopaedic Association

Southern Orthopaedic Association

TEXTBOOK CHAPTERS

- ◆ Daji, A. V., & Routman, H. D. (2024). Revising a Failed Glenoid in Reverse Total Shoulder Arthroplasty. In *Revision Shoulder Arthroplasty* (pp. 157-168). Cham: Springer International Publishing.
- ◆ Routman, H. D., Parsons, M., Levy, J. C., Chuinard, C. R., Codsì, M. J., & Sanchez-Sotelo, J. (2024). Physical Examination and Proper Imaging Modalities. In *Reverse Shoulder Arthroplasty* (pp. 45-70). CRC Press.
- ◆ Aibinder, W. R., & Routman, H. D. (2022). Complications in primary and revision shoulder arthroplasty. In *AAOS Comprehensive Orthopaedic Review 4*.
- ◆ Kazanjian, J. K., & Routman, H. D. (2020). Arthroscopic Subscapularis Repair. In *Video Atlas of Rotator Cuff Repair*. Thieme Medical Publishers.
- ◆ Routman, H. D. (2019). Patient Specific Instrumentation and Preoperative Planning in Reverse Shoulder Arthroplasty. In Parsons, B. O., & Hasan, S. S., *Surgical Insights: Reverse Shoulder Arthroplasty AAOS*. (online course)
- ◆ Ascione, F., & Routman, H. D. (2019). Severe glenoid erosion (B2, B3, C, E2, E3) treated with RSA. In *Complex and Revision Shoulder Arthroplasty: An Evidence-Based Approach to Evaluation and Management* (pp. 59-73). Cham: Springer International Publishing.
- ◆ Routman, H. D. (2012). Glenohumeral Arthritis. In Gaunt, B. W., *A Systemic Approach to Shoulder Rehabilitation*. (pp. 94-103). HPRC Incorporated.
- ◆ Routman, H. D., & Gaunt, B. W. (2012). Conservative Rehabilitation of Glenohumeral Arthritis. In Gaunt, B. W., *A Systemic Approach to Shoulder Rehabilitation*. (pp. 500-511). HPRC Incorporated.

PUBLICATIONS

- ◆ Mohamed, A., John DQ., Jackson, GR., Lima, DJL., Movassaghi, A., Routman HD., Sabesan, V. (2025). Rate of Improvement Following Reverse Shoulder Arthroplasty: A Comparison of Primary and Revision Reverse Shoulder Arthroplasty. *Seminars in Arthroplasty: JSES*
- ◆ Goguen, J., Forbes, J., Jackson, G. R., Movassaghi, A., Lapica, H., Routman, H. D., & Sabesan, V. J. (2025). Optimal Timing of Reverse Total Shoulder Arthroplasty for Proximal Humerus Fractures. *Journal of Shoulder and Elbow Surgery*.
- ◆ Mohamed, A. A., Daji, S., Fomunung, C. K., Girshfeld, S. J., Macknofsky, B., Lavin, A., Yerke-Hansen, P., Jackson, G. R., Routman, H. D., & Sabesan, V. J. (2025). Outcomes of Augmented versus Standard Baseplates in Reverse Shoulder Arthroplasty. *Journal of Shoulder and Elbow Surgery*.
- ◆ Mohamed, A., Kushner, J. Jackson, G. R., Movassaghi, A., Routman, H. D., & Sabesan, V. J. (2025). Does Sleep Comfort Predict Recovery After Primary and Revision RSA? *Journal of Orthopaedic Experience & Innovation*.
- ◆ Routman, H. (2025). In My Experience.. Innovations in Reverse Shoulder Arthroplasty: The Roles of The Greater Tuberosity and Deltoid. *Journal of Orthopaedic Experience & Innovation*, 6(1).
- ◆ Allen, C., Kumar, V., Elwell, J., Overman, S., Schoch, B. S., Aibinder, W., Parsons, I. M., Watling, J., Ko, J. K. Gobbato, B., Throckmorton, T., Routman, H. D., & Roche, C. P. (2024). Evaluating the fairness and accuracy of machine learning–based predictions of clinical outcomes after anatomic and reverse total shoulder arthroplasty. *Journal of shoulder and elbow surgery*, 33(4), 888-899.
- ◆ Girshfeld, S. J., Lama, G., Macknofsky, B., Fomunung, C., John, D., Jackson, G. R., Routman, H. D., & Sabesan, V. J. (2024, June). Does prior ipsilateral steroid injection affect outcomes after shoulder arthroplasty?. In *Seminars in Arthroplasty: JSES* (Vol. 34, No. 2, pp. 398-405). WB Saunders.
- ◆ Hansen, P. Y., Fomunung, C. K., Lavin, A., Daji, A. V., Jackson, G. R., Routman, H. D., & Sabesan, V. J. (2024). Outcomes Following Revision Reverse Shoulder Arthroplasty for Infection. *Journal of Shoulder and Elbow Surgery*.
- ◆ Jackson, G. R., Brusalis, C. M., Mowers, C. C., Daji, A. V., John, D. Q., Movassaghi, A., Routman, H. D., & Sabesan, V. J. (2024). Prior Shoulder Arthroscopy is Associated with Inferior Clinical Outcomes Following Primary Reverse Shoulder Arthroplasty for Rotator Cuff Tear Arthropathy. *Journal of Orthopaedic Experience & Innovation*, 5(2).
- ◆ Jackson, G. R., Knapik, D. M., Mowers, C. C., Lapica, H., Coutelle, N., Movassaghi, A., Routman, H. D., & Sabesan, V. J. (2024). Reverse Shoulder Arthroplasty Provides Durable Outcomes Regardless of Diagnosis and Pathology. *Journal of Orthopaedic Experience & Innovation*, 5(2).
- ◆ Larose, G., Aibinder, W. R., Greene, A. T., Roche, C. P., Grey, S., Faber, K. J., Routman, H. D., Antuna, S., Wright, T. J., Flurin, P. H., Zuckerman, J. D., & Virk, M. S. (2024). Two-year minimum survivorship and radiographic analysis of a press fit short humeral stem for total shoulder arthroplasty. *JSES international*, 8(1), 191-196.
- ◆ Ogunfuwa, F. O., Desai, A., Fomunung, C., Jackson, G. R., Routman, H. D., & Sabesan, V. J. (2024). Acromiohumeral Distance: Can Radiographic Factors Impact Outcomes after Reverse Shoulder Arthroplasty?. *Journal of Orthopaedic Experience & Innovation*, 5(2).
- ◆ Simmons, C., DeGrasse, J., Polakovic, S., Aibinder, W., Throckmorton, T., Noerdlinger, M., Papandrea, R., Trenhaile, S., Schoch, B., Gobbato, B., Routman, H. D., Parsons, I. M., & Roche, C. P. (2024). Initial clinical experience with a predictive clinical decision support tool for anatomic and reverse total shoulder arthroplasty. *European Journal of Orthopaedic Surgery & Traumatology*, 34(3), 1307-1318.
- ◆ Colasanti, C. A., Lin, C. C., Ross, K. A., Luthringer, T., Elwell, J. A., Roche, C. P., Virk, M. S., Simovitch, R. W., Routman, H. D., & Zuckerman, J. D. (2023). Augmented baseplates yield optimum outcomes when compared with bone graft augmentation for managing glenoid deformity during reverse total shoulder arthroplasty: a retrospective comparative study. *Journal of Shoulder and Elbow Surgery*, 32(5), 958-971.
- ◆ Labrum IV, J. T., Routman, H. D., Friedman, R. J., Roche, C. P., & Byram, I. R. (2023, March). Stemless, short, and standard humeral stems in total shoulder arthroplasty: is there a difference in intraoperative measures, pain, and outcomes in the short term?. In *Seminars in Arthroplasty: JSES* (Vol. 33, No. 1, pp. 200-206). WB Saunders.
- ◆ Roche, C. P., Fan, W., Simovitch, R. W., Wright, T. W., Flurin, P. H., Zuckerman, J. D., & Routman, H. D. (2023). Impact of accumulating risk factors on the acromial and scapular fracture rate after reverse total shoulder arthroplasty with a medialized glenoid–lateralized humerus onlay prosthesis. *Journal of Shoulder and Elbow Surgery*, 32(7), 1465-1475.

- ◆ Roche, C. P., Jones, R., Routman, H. D., Marczuk, Y., Flurin, P. H., Wright, T. W., & Zuckerman, J. D. (2023). Longitudinal analysis of shoulder arthroplasty utilization, clinical outcomes, and value: a comparative assessment of changes in improvement over 15 years with a single platform shoulder prosthesis. *Journal of Shoulder and Elbow Surgery*, 32(8), 1562-1573.
- ◆ Sabesan, V., Lama, G., Khoury, L., Fomunung, C. K., Lapica, H., Peaguda, C. A. F., & Routman, H. D. (2023, December). The impact of surgeon volume on subscapularis repair and postoperative management following reverse shoulder arthroplasty. In *Seminars in Arthroplasty: JSES* (Vol. 33, No. 4, pp. 715-721). WB Saunders.
- ◆ Harries, L. W., Roche, C. P., Routman, H. D., Friedman, R. J., & Donaldson, O. W. (2022, March). Effect of subscapularis repair in patients with an intact rotator cuff undergoing reverse total shoulder arthroplasty. In *Seminars in Arthroplasty: JSES* (Vol. 32, No. 1, pp. 100-106). WB Saunders.
- ◆ Kumar, V., Allen, C., Overman, S., Teredesai, A., Simovitch, R., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Routman, H. D., & Roche, C. (2022, June). Development of a predictive model for a machine learning–derived shoulder arthroplasty clinical outcome score. In *Seminars in Arthroplasty: JSES* (Vol. 32, No. 2, pp. 226-237). WB Saunders.
- ◆ Kumar, V., Schoch, B. S., Allen, C., Overman, S., Teredesai, A., Aibinder, W., Parsons, I. M., Watling, J., Ko, J. K., Gobbato, B., Throckmorton, T., Routman, H. D., & Roche, C. (2022). Using machine learning to predict internal rotation after anatomic and reverse total shoulder arthroplasty. *Journal of shoulder and elbow surgery*, 31(5), e234-e245.
- ◆ Aibinder, W., Schoch, B., Parsons, M., Watling, J., Ko, J. K., Gobbato, B., Throckmorton, T., Routman, H. D., Fan, W., Simmons, C., & Roche, C. (2021). Risk factors for complications and revision surgery after anatomic and reverse total shoulder arthroplasty. *Journal of Shoulder and Elbow Surgery*, 30(11), e689-e701.
- ◆ Baessler, A. M., Brolin, T. J., Azar, F. M., Sen, S., Chang, M., Falkner, D., Zmistowski, B. M., Routman, H. D., Namdari, S., Gulotta, L. V., & Throckmorton, T. W. (2021). Development and validation of a predictive model for outcomes in shoulder arthroplasty: a multicenter analysis of nearly 2000 patients. *Journal of shoulder and elbow surgery*, 30(12), 2698-2702.
- ◆ Kumar, V., Roche, C., Overman, S., Simovitch, R., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Routman, H. D., & Teredesai, A. (2021). Using machine learning to predict clinical outcomes after shoulder arthroplasty with a minimal feature set. *Journal of shoulder and elbow surgery*, 30(5), e225-e236.
- ◆ Kumar, V., Roche, C., Overman, S., Simovitch, R., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Routman, H. D., & Teredesai, A. (2021, July). Use of machine learning to assess the predictive value of 3 commonly used clinical measures to quantify outcomes after total shoulder arthroplasty. In *Seminars in Arthroplasty: JSES* (Vol. 31, No. 2, pp. 263-271). WB Saunders.
- ◆ Mandava, N. K., Sethi, P. M., Routman, H. D., Liddy, N., Haidamous, G., & Denard, P. J. (2021). Opioid requirement after rotator cuff repair is low with a multimodal approach to pain. *Journal of Shoulder and Elbow Surgery*, 30(7), e399-e408.
- ◆ Roche, C., Kumar, V., Overman, S., Simovitch, R., Flurin, P. H., Wright, T., Routman, H. D., Teredesai, A., & Zuckerman, J. (2021). Validation of a machine learning–derived clinical metric to quantify outcomes after total shoulder arthroplasty. *Journal of Shoulder and Elbow Surgery*, 30(10), 2211-2224.
- ◆ Roche, C., Simmons, C., Polakovic, S., Schoch, B., Parsons, M., Aibinder, W., Watling, J. Ko, J. K., Gobbato, B., Throckmorton, T. W., & Routman, H. (2021, June). Initial clinical experience with predict+: a new clinical decision support tool for shoulder arthroplasty. In *Orthopaedic Proceedings* (Vol. 103, No. SUPP_9, pp. 16-16). Bone & Joint.
- ◆ Sabesan, V., Chatha, K., Lima, D. J., Yawman, J. P., Khoury, L., & Routman, H. (2021). Equal care for all? Do surgical outcomes in shoulder arthroplasty depend on insurance type?. *JSES international*, 5(5), 900-904.
- ◆ Carofino, B., Routman, H., & Roche, C. (2020). The influence of preoperative external rotation weakness or stiffness on reverse total shoulder arthroplasty. *JSES international*, 4(2), 382-387.
- ◆ Kumar, V., Roche, C., Overman, S., Simovitch, R., Flurin, P. H., Wright, T. W., Routman, H. D., & Teredesai, A. (2020). What is the accuracy of three different machine learning techniques to predict clinical outcomes after shoulder arthroplasty?. *Clinical Orthopaedics and Related Research*, 478(10), 2351-2363.
- ◆ Parsons, M., Routman, H. D., Roche, C. P., & Friedman, R. J. (2020). Preoperative external rotation deficit does not predict poor outcomes or lack of improvement after reverse total shoulder arthroplasty. *Journal of Orthopaedics*, 21, 379-383.

- ◆ Routman, H. D., Simovitch, R. W., Wright, T. W., Flurin, P. H., Zuckerman, J. D., & Roche, C. P. (2020). Acromial and scapular fractures after reverse total shoulder arthroplasty with a medialized glenoid and lateralized humeral implant: an analysis of outcomes and risk factors. *JBJS*, 102(19), 1724-1733.
- ◆ Hansen, M. L., & Routman, H. (2019). The biomechanics of current reverse shoulder replacement options. *Annals of Joint*, 4.
- ◆ Maslow, J., Wanner, J. P., Routman, H., & Byram, I. (2019). The disappearing stem: The changing humeral side of shoulder arthroplasty. In *International Congress for Joint Reconstruction*. <https://icjr.net/articles/the-disappearing-stem-the-changing-humeral-side-of-shoulder-arthroplasty> Published February (Vol. 21).
- ◆ Simovitch, R. W., Roche, C. P., Jones, R. B., Routman, H. D., Marczuk, Y., Wright, T. W., & Zuckerman, J. D. (2019). Effect of tuberosity healing on clinical outcomes in elderly patients treated with a reverse shoulder arthroplasty for 3-and 4-part proximal humerus fractures. *Journal of orthopaedic trauma*, 33(2), e39-e45.
- ◆ Routman, H. D., & Savoie, F. H. B. (2018). Subscapularis-sparing approaches to total shoulder arthroplasty: ready for prime time?. *Clinics in Sports Medicine*, 37(4), 559-568.
- ◆ Routman, H. D., Triplet, J. J., Kurowicki, J., & Singh, N. (2018). Isolated rhabdomyolysis of the infraspinatus muscle following the CrossFit "Sissy test": A report of two cases. *JBJS case connector*, 8(1), e2.
- ◆ Routman, H. D., Israel, L. R., Moor, M. A., & Boltuch, A. D. (2017). Local injection of liposomal bupivacaine combined with intravenous dexamethasone reduces postoperative pain and hospital stay after shoulder arthroplasty. *Journal of Shoulder and Elbow Surgery*, 26(4), 641-647.
- ◆ Gilot, G., Alvarez-Pinzon, A. M., Wright, T. W., Flurin, P. H., Krill, M., Routman, H. D., & Zuckerman, J. D. (2015). The incidence of radiographic aseptic loosening of the humeral component in reverse total shoulder arthroplasty. *Journal of shoulder and elbow surgery*, 24(10), 1555-1559.
- ◆ Hamilton, M. A., Diep, P., Roche, C., Flurin, P. H., Wright, T. W., Zuckerman, J. D., & Routman, H. (2015). Effect of reverse shoulder design philosophy on muscle moment arms. *Journal of Orthopaedic Research*, 33(4), 605-613.
- ◆ Roche, C. P., Diep, P., Wright, T. W., Flurin, P. H., Zuckerman, J. D., & Routman, H. D. (2015). Optimizing deltoid efficiency with reverse shoulder arthroplasty using a novel inset center of rotation glenosphere design. *Bulletin of the NYU Hospital for Joint Diseases*, 73(1), S37.
- ◆ Roche, C. P., Diep, P., Wright, T. W., Flurin, P. H., Zuckerman, J. D., & Routman, H. D. (2015). Impact of posterior wear on muscle length with reverse shoulder arthroplasty. *Bulletin of the NYU Hospital for Joint Diseases*, 73(1), S63.
- ◆ Routman, H. D., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Hamilton, M. A., & Roche, C. P. (2015). Reverse shoulder arthroplasty prosthesis design classification system. *Bulletin of the NYU Hospital for Joint Diseases*, 73(S1), S5-S5.
- ◆ Routman, H. D., Becks, L., & Roche, C. P. (2015). Stemless and short stem humeral components in shoulder arthroplasty. *Bulletin of the NYU Hospital for Joint Diseases*, 73(S1), S145-S145.
- ◆ Hamilton, M. A., Roche, C. P., Diep, P., Flurin, P. H., & Routman, H. D. (2013). Effect of prosthesis design on muscle length and moment arms in reverse total shoulder arthroplasty. *Bull Hosp Jt Dis*, 71(Suppl 2), S31-5.
- ◆ Roche, C. P., Marczuk, Y., Wright, T. W., Flurin, P. H., Grey, S. G., Jones, R. B., Routman, H. D., Gilot, G. J., & Zuckerman, J. D. (2013). Scapular notching in reverse shoulder arthroplasty: validation of a computer impingement model. *Bulletin of the NYU Hospital for Joint Diseases*, 71(4), 278.
- ◆ Roche, C. P., Diep, P., Crosby, L. A., Flurin, P. H., Wright, T. W., Zuckerman, J. D., & Routman, H. D. (2013). Impact of inferior glenoid tilt, humeral retroversion, bone grafting, and design parameters on muscle length and deltoid wrapping in reverse shoulder arthroplasty. *Bulletin of the NYU Hospital for Joint Diseases*, 71(4), 284.
- ◆ Roche, C. P., Diep, P., Flurin, P. H., & Routman, H. D. (2013). Design rationale for a posterior/superior offset reverse shoulder prosthesis. *Bulletin of the NYU Hospital for Joint Diseases*, 71(2), S18.
- ◆ Roche, C. P., Diep, P., Flurin, P. H., & Routman, H. D. (2013). Comparison of bone removed with reverse total shoulder arthroplasty. *Bulletin of the NYU Hospital for Joint Diseases*, 71(2), S36.
- ◆ Roche, C., Diep, P., Hamilton, M., Flurin, P. H., Zuckerman, J., & Routman, H. (2013, December). Improving muscle length using an offset humeral tray with reverse total shoulder arthroplasty. In *Orthopaedic Proceedings* (Vol. 95, No. SUPP_34, pp. 506-506). Bone & Joint.

- ◆ Roche, C., Diep, P., Hamilton, M., Flurin, P. H., Zuckerman, J., & Routman, H. (2013, December). Increasing muscle moment arms using an offset humeral tray with reverse total shoulder arthroplasty. In *Orthopaedic Proceedings* (Vol. 95, No. SUPP_34, pp. 507-507). Bone & Joint.
- ◆ Roche, C., Diep, P., Hamilton, M., Wright, T., Flurin, P. H., Zuckerman, J., & Routman, H. (2013, January). Biomechanical analysis of 3 commercially available reverse shoulder designs in a normal and medially eroded scapula. In *59th Annual Orthopaedic Research Society Meeting. San Antonio, Texas*.
- ◆ Roche, C. P., Marczuk, Y., Wright, T. W., Flurin, P. H., Grey, S., Jones, R., Routman, H. D., Gilot, G. J., & Zuckerman, J. D. (2013). Scapular notching and osteophyte formation after reverse shoulder replacement: radiological analysis of implant position in male and female patients. *The bone & joint journal*, 95(4), 530-535.
- ◆ Routman, H. D. (2013). Indications, Technique, and Pitfalls of Reverse Total Shoulder Arthroplasty for Proximal Humerus Fractures. *Bulletin of the Hospital for Joint Diseases*, 71.
- ◆ Routman, H. D. (2013). The role of subscapularis repair in reverse total shoulder arthroplasty. *Bulletin of the Hospital for Joint Diseases*, 71. McCluskey, G. M. I., Routman, H. D., & Director, D. O. (2011). The deltopectoral approach for reverse shoulder arthroplasty. *St Fr Orthop Inst Sci Bull*, 3, 148-160.
- ◆ Routman, H. D. (2010). Tendon transfers about the shoulder. *Current Orthopaedic Practice*, 21(5), 453-461.
- ◆ Routman, H. (2007). The wheelchair axillary view of the shoulder. *Orthopedics*, 30(4), 265.
- ◆ Routman, H. D. (2001). What is Arthroscopy? *Hughston Health Alert*, 13(2).
- ◆ Routman, H. D. (2001). Thermal Capsulorrhaphy of the Shoulder. *Hughston Health Alert*, 13(2).

PATENTS

- ◆ Roche, C. P., Kumar, V., Overman, S., Teredesai, A., **Routman, H. D.**, Simovitch, R. W., Flurin, P. H., Wright, T. W., & Zuckerman, J. D. (2021, October 21). Method and System for Modeling Predictive Outcomes of Arthroplasty Surgical Procedures. USPA 20210322100A1
- ◆ Roche, C. P., **Routman, H. D.**, Klug, R. A., & Gaydos, C. M. (2017, November 23). Humeral Trays with Tuberosity Augments Sufficiently Designed to Improve Joint Mechanics. USPA 20170333197
- ◆ Roche, C. P., **Routman, H. D.**, Wright, T. W., & Gaydos, C. M. (2014, February 6). Prosthetic Devices to Improve Joint Mechanics in Arthroplasty. USPA 20140039633A1

MULTIMEDIA/ VIDEO PRODUCTION

VIDEO EXPERIENCE

- ◆ Routman, H. D. (2022). ORTHODOME. Navigated Anatomic and Reverse Shoulder Arthroplasty Using GPS. American. *Academy of Orthopedic Surgeons*. Annual Meeting, Chicago, IL.
- ◆ Routman H.D. (2016). "A Comprehensive Approach to Glenoid Exposure" Surgical Technique Video. *Exactech*.
- ◆ Roche C., Hansen M., Crosby L. A., Flurin P. H., Wright T. W., Zuckerman J. D., **Routman H. D.** (2015). The Biomechanical Summary of Reverse Shoulder Arthroplasty. *American Academy of Orthopaedic Surgeons Orthopaedic*. Annual Meeting, Las Vegas, NV.

VUMEDI LIVE WEBINAR

- ◆ *Inlay/ Onlay in Reverse Shoulder Arthroplasty – the Debate that Isn't* (Aug 2023)
- ◆ *Comparative Reverse Shoulder Arthroplasty Biomechanics* (Jan 2014)

CONFERENCE PRESENTATIONS

PODIUM PRESENTATIONS

- ◆ Goguen, J., Forbes, J., Jackson, G., Movassaghi, A., Lapica, H., **Routman, H.**, Sabesan, V. (2025, July). Presenter. *Optimal Timing of Reverse Total Shoulder Arthroplasty for Proximal Humerus Fractures*. Podium Presentation. Southern Orthopaedic Association Annual Meeting, JW Marriott, Marco Island, FL.

- ◆ Mohamed, A., Da Costa, A., McKinley, M., Calpey, J., Movassaghi, A., Jackson, G., **Routman, H.**, Sabesan, V. (2025, July). Presenter. *Risk Factors Resulting in Suboptimal Outcomes Following Reverse Shoulder Arthroplasty*. Podium Presentation. Southern Orthopaedic Association Annual Meeting, JW Marriott, Marco Island, FL.
- ◆ Forbes, J., John, D., Jackson, G., Movassaghi, A., **Routman, H.**, Sabesan, V. J. (2024, Sep 6). Presenter. *Understanding the Effect of Interscalene Blocks on Pulmonary Function*. Podium Presentation. Clinical Orthopaedic Society, Tampa, FL.
- ◆ Movassaghi, A., Jackson, G., Fomunung, C., Fernandez, C., **Routman, H.**, Sabesan, V. J. Presenter. *Reverse Shoulder Arthroplasty Provides Durable Outcomes Regardless of Diagnosis*. Podium Presentation. Clinical Orthopaedic Society, (2024, Sep 5), Tampa, FL; International Society for Technology in Arthroplasty, (2024, Aug 30). Nashville, TN.
- ◆ Girshfeld, S., Lavin, A., **Routman, H. D.**, Elkhechen, J., Fomunung, C., Sabesan, V. J. Presenter. *Optimal Treatment for Glenoid Bone Loss: Augmented Versus Standard Reverse Shoulder Arthroplasty?* Podium Presentation. American Shoulder and Elbow Surgeons Annual Meeting, (2022, October), Atlanta, GA; International Society for Technology in Arthroplasty Annual Meeting, (2022, Aug 31- Sep 3), Maui, HI; Mid-Atlantic Orthopaedic Association Annual Meeting, (2022, Apr 6-10), San Antonio, TX; American Academy of Orthopedic Surgeons Annual Meeting, (2022, Mar 22-26), Chicago, IL; Advanced Shoulder Arthroplasty Annual Meeting, (2022, January 20-22), Snowbird, UT; Mid-American Orthopedic Association Annual Meeting, (2021), Amelia Island, FL.
- ◆ **Routman, H. D.**, Friedman, R. J., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Roche, C. P. (2019). Presenter. *The Mid-Term Outcomes of Reverse Shoulder Arthroplasty with and Without Subscapularis Repair*. Podium Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, Las Vegas, NV.
- ◆ **Routman, H. D.**, Friedman, R. J., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Roche, C. P. (2019). Presenter. *Acromial and Scapular Fractures After Reverse Shoulder Arthroplasty: Analysis of 4098 Patients with A Single Implant*. Podium Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, Las Vegas, NV.
- ◆ Parsons, I. M., Friedman, R. J., **Routman, H. D.**, Roche, C.P. (2019). Co-Author. *Pre-operative External Rotation Deficit Does Not Predict Poor Outcomes or Lack of Improvement after Reverse Shoulder Arthroplasty*. Podium Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, Las Vegas, NV.
- ◆ Friedman, R. J., **Routman, H. D.**, Roche, C. P., Parsons, I. M. (2018). Co-Author. *Clinical Factors Leading to Improved Outcomes Following Primary Reverse Total Shoulder Arthroplasty*. Podium Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA.
- ◆ Friedman, R. J., **Routman, H. D.**, Wright, T. W., Zuckerman, J. D., Flurin, P. H., Roche, C.P. (2018). Co-Author. *Comparison of TSA Outcomes with Keeled and Pegged Glenoid of Equivalent Radial Mismatch with Five Years Minimum Follow Up*. Podium Presentation. European Shoulder and Elbow Society 28th Annual Meeting. Geneva, Switzerland.
- ◆ **Routman, H. D.**, Friedman, R. J., Zuckerman, J. D., Wright, T. W., Flurin, P. H., Roche, C. P. (2018). Presenter. *Comparison of Midterm Outcomes of Reverse Total Shoulder Arthroplasty with and without Repair of the Subscapularis*. Podium Presentation. European Shoulder and Elbow Society 28th Annual Meeting. Geneva, Switzerland.

POSTER PRESENTATIONS

- ◆ McKinley, M., Mohamed, A., Da Costa, A., Calpey, J., Movassaghi, A., Jackson, G., **Routman, H.**, Sabesan, V. *Risk Factors Resulting in Suboptimal Outcomes Following Reverse Shoulder Arthroplasty*. Poster session. Shoulder360 Conference, (2025, April), Miami Beach, FL; Clinical Orthopaedic Society, (2024, September), Tampa, FL.
- ◆ Movassaghi, A., Mohamed, A., John, D., Jackson, G. R., Lima, D., **Routman, H.**, Sabesan, V. *Rate of Improvement Following Reverse Shoulder Arthroplasty: A Comparison of Primary versus Revision*. Poster session. Shoulder360 Conference, (2025, April), Miami Beach, FL, [Best Poster Award]; Shoulder360 Annual Meeting, (2024, May 2-4), Miami Beach, FL; Clinical Orthopaedic Society, (2024, Sep 4), Tampa, FL; Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL.
- ◆ Movassaghi, A., Rohatgi, A., Redden, A., Baran, J. V., Moriconi, C., Jackson, G. R., **Routman, H. D.**, Sabesan, V. J. *Do Racial Differences Impact Complication Rates after Total Joint Arthroplasty?* Poster session. Shoulder360 Conference, (2025, April), Miami Beach, FL; Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; American Academy of Orthopedic Surgeons Annual Meeting, (2024, Feb 12-16), San Francisco, CA; Mid-Atlantic Orthopaedic Association Annual Meeting, (2023, Apr 19-23), Miramar Beach, FL.

- ◆ Mohamed, A. A., Da Costa, A. V., Fernandez, C., Jackson, G., **Routman, H. D.**, Calpey, J. E., Sabesan, V.J. *Rate of Recovery Following Reverse Shoulder Arthroplasty*. Poster session. American Academy of Orthopaedic Surgeons Annual Meeting, (2025, March), San Diego, CA (Program No. e455); Clinical Orthopaedic Society, (2024, Sep 4), Tampa, FL; International Society for Technology in Arthroplasty, (2024, Aug 28-31), Nashville, TN; Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; European Society for Surgery of the Shoulder and the Elbow Annual Meeting, (2022, Sep 7-9), Dublin, Ireland.
- ◆ Da Costa, A., Redden, A., Mohamad, A., Fomunung, C., Kushner, J., Jackson, G., Movassaghi, A., **Routman, H.**, Sabesan, V. *Influence of Age and Sex on Meeting MCID Following Reverse Shoulder Arthroplasty*. Poster session. Clinical Orthopaedic Society, (2024, Sep 4), Tampa, FL; International Society for Technology in Arthroplasty, (2024, Aug 28-31), Nashville, TN; Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; Mid-Atlantic Orthopaedic Association Annual Meeting, (2024, Apr 13), Bonita Springs, FL.
- ◆ Mohamed, A., Childers, J., Kushner, J., Fernandez, C., Fomunung, C., Jackson, G., Movassaghi, A., Sabesan, V., **Routman, H.** *Sleep Comfort Predicts Recovery After Primary and Revision RSA*. Poster session. Clinical Orthopaedic Society, (2024, Sep 4), Tampa, FL; International Society for Technology in Arthroplasty, (2024, Aug 28-31), Nashville, TN; Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; Mid-Atlantic Orthopaedic Association Annual Meeting, (2024, Apr 13), Bonita Springs, FL.
- ◆ Mohamed, A., Redden, A., Jackson, G., Lima, D., Movassaghi, A., **Routman, H.**, Sabesan, V. *Determining the MCID and SCB Following Reverse Shoulder Arthroplasty*. Poster session. Clinical Orthopaedic Society, (2024, Sep 4), Tampa, FL; International Society for Technology in Arthroplasty, (2024, Aug 30), Nashville, TN; Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; Shoulder360 Annual Meeting, (2023, Apr 13-15), Miami Beach, FL.
- ◆ Redden, A., Movassaghi, A., Jackson, G., Mohamed, A., Goguen, J., **Routman, H.**, Sabesan, V. J. (2024, Aug 28-31). *Risk Factors That Predispose Patients to Sub-Optimal Outcomes After Reverse Shoulder Arthroplasty*. Poster session. International Society for Technology in Arthroplasty, Nashville, TN.
- ◆ Sabesan, V.J., John, D.Q., Forbes, J., Jackson, G.R., **Routman, H. D.** *Understanding the Effect of Interscalene Blocks on Pulmonary Function: Can We Prevent Complications?* Poster session. International Society for Technology in Arthroplasty, (2024, Aug 28-31), Nashville, TN; Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; Shoulder360 Annual Meeting, (2024, May 2-4), Miami Beach, FL.
- ◆ Jackson, G.R., Brusalis, C.M., Mowers, C.C., Daji, A., Sabesan, V.J., **Routman, H. D.** *Prior Shoulder Arthroscopy is Associated with Worse Outcomes Following Primary Reverse Shoulder Arthroplasty*. Poster session. Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; Shoulder360 Annual Meeting, (2024, May 2-4), Miami Beach, FL; Mid-Atlantic Orthopaedic Association Annual Meeting, (2024, Apr 11), Bonita Springs, FL; Advanced Shoulder Arthroplasty Annual Meeting, (2024, Jan 18), Snowbird, UT; International Society for Technology in Arthroplasty Annual Meeting, (2023, Sep 27-30), New York City, NY.
- ◆ Mohamed, A.A., Fomunung, C.F., Girshfeld, S.J., Macknofsky, B., Jackson, G.R., **Routman, H. D.**, Sabesan, V.J. *Outcomes of Augmented versus Standard Baseplates in Reverse Shoulder Arthroplasty*. Poster session. Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; American Academy of Orthopedic Surgeons, (2024, Feb 12-16), San Francisco, CA; International Society for Technology in Arthroplasty Annual Meeting, (2023, Sep 27-30), New York City, NY.
- ◆ Ogunfuwa, F., Desai, A., Fomunung, C.F., **Routman, H. D.**, Jackson, G.R., Sabesan, V.J. *Acromiohumeral Distance: Are Radiographic Factors Correlated with Outcomes After Reverse Shoulder Arthroplasty?* Poster session. Southern Orthopaedic Association Annual Meeting, (2024, Jul 17-20), Miami Beach, FL; Mid-Atlantic Orthopaedic Association Annual Meeting, (2024, Apr 13), Bonita Springs, FL.
- ◆ Jackson, G.R., Knapik, D.M., Mowers, C.C., Lapica, H., Sabesan, V.J., **Routman, H. D.** (2024, May 2-4). *Reverse Shoulder Arthroplasty Provides Durable Outcomes Regardless of Diagnosis and Pathology*. Poster session. Shoulder 360 Annual Meeting, Miami Beach, FL.
- ◆ Jackson, G.R., Macknofsky, B., Mohamed, A.A., Fomunung, C., Elkhechen, J., **Routman, H. D.**, Sabesan, V.J. *Does Implant Innovation Optimize the Rate of Recovery in Reverse Shoulder Arthroplasty?* Poster session. Shoulder360 Annual Meeting, (2024, May 2-4), Miami Beach, FL; Winter Technology & Innovation in Orthopaedics Annual Meeting, (2023, Jan 27-28), Fort Lauderdale, FL; Southern Orthopaedic Society Annual Meeting, (2023, Jul 26-28), Destin, FL; Florida Orthopaedic Society Annual Meeting, (2023, May 18-21), Coral Gables, FL; Mid-Atlantic Orthopaedic Association Annual Meeting, (2023, Apr 19-23), Miramar Beach, FL.

- ◆ Jackson, G.R., Girshfeld, S., Macknofsky, B., Lama, G., Fomunung, C.F., Fernandez, C., **Routman, H. D.**, Sabesan, V.J. (2024, Apr 14). *Effect of Preoperative Steroid Injections on Outcomes Following Shoulder Arthroplasty*. Poster session. Mid-Atlantic Orthopaedic Association Annual Meeting, Bonita Springs, FL.
- ◆ Sabesan, V.J., Girshfeld, S., Pallissery, W., Lama, G., Kane, K., Mohamad, A., Jackson, G.R., Fomunung, C., **Routman, H. D.** *Subacromial Injection: Effects Preoperative Pain and Function in Arthroscopic Rotator Cuff Repair*. Poster session. American Academy of Orthopedic Surgeons Annual Meeting, (2024, Feb 12-16), San Francisco, CA; International Society for Technology in Arthroplasty Annual Meeting, (2023, Sep 27-30), New York City, NY.
- ◆ Ogunfuwa, F., Desai, A., Fomunung, C.K., Fernandez, C., **Routman, H. D.**, Sabesan, V. J. *Acromiohumeral Distance: Can Radiographic Factors Help Predict Outcomes after Reverse Shoulder Arthroplasty?* Poster session. International Society for Technology in Arthroplasty Annual Meeting, (2023, Sep 27-30), New York City, NY; Shoulder 360 Annual Meeting, (2023, Apr 13-15), Miami Beach, FL; European Society for Surgery of the Shoulder and the Elbow Annual Meeting, (2022, Sep 7-9), Dublin, Ireland; International Society for Technology in Arthroplasty Annual Meeting, (2022, Aug 31 – Sep 3), Maui, HI.
- ◆ Girshfeld, S., Pallissery, W., Redde, A., Lavin, A., Elkhechen, J., Fomunung, C., **Routman, H.**, Sabesan, V.J. *Do Steroid Injections Affect Outcomes for Arthroscopic Rotator Cuff Repair?* Poster session. American Orthopaedic Society for Sports Medicine Annual Meeting, (2023, Jul 11-14), Washington, D.C.; Shoulder360 Annual Meeting, (2023, Apr 13-15), Miami Beach, FL; American Shoulder Elbow Society Annual Meeting, (2022, Oct 6-9), Atlanta, GA.
- ◆ Fomunung, C., Ogunfuwa, F., Fernandez, C., **Routman, H.**, Sabesan, V.J. *Understanding Outcomes with Reverse Shoulder Arthroplasty for Proximal Humeral Fractures: Acute vs Malunions*. Poster session. Medical Student Orthopaedic Society Annual Meeting, (2023, Apr 23), Virtual; Winter Technology & Innovation in Orthopaedics Annual Meeting, (2023, Jan 27-28), Fort Lauderdale, FL; Southern Orthopaedic Association Annual Meeting, (2022, Jul 20-23), White Sulphur Springs, WV.
- ◆ Mohamed, A. A., Sabesan, V. J., Elkhechen, J., Fomunung, C., Fernandez, C., **Routman, H.** (2023, Apr 19-23). *Risk Factors that Predispose Patients to Failure After Augmented Reverse Shoulder Arthroplasty*. Poster session. Mid-Atlantic Orthopaedic Association Annual Meeting, Miramar Beach, FL.
- ◆ Hansen, P.Y., Fomunung, C., Fernandez, C., John, D.Q., **Routman, H. D.**, Sabesan, V.J. *Complications After Revision Reverse Shoulder Arthroplasty for Infection*. Poster session. Shoulder 360 Annual Meeting, (2023, Apr 13-15), Miami Beach, FL; Eastern Orthopaedic Association Annual Meeting, (2022, Oct 27-29), Naples, FL; American Academy of Orthopedic Surgeons Annual Meeting, (2022, Mar 22-26), Chicago, IL; Mid-Atlantic Orthopaedic Association Annual Meeting, (2021, Sep 29 - Oct 3), Amelia Island, FL.
- ◆ Sabesan, V.J., Lama, G., Khoury, L., Fomunung, C.K., Lapica, H., Fernandez, C., **Routman, H. D.** (2023, Apr 13-15). *What is the Optimal Postoperative Subscapularis Management and Rehab Following Reverse Shoulder Arthroplasty?* Poster session. Shoulder 360 Annual Meeting, Miami Beach, FL.
- ◆ Sabesan, V.J., Rohatgi, A., Redden, A., Baran, J.V., Fomunung, C., Fernandez, C., **Routman, H. D.** (2023, Apr 13-15). *Can Modifiable Lifestyle Risk Factors Impact Healthcare Resource Utilization and Costs after Shoulder Arthroplasty?* Poster session. Shoulder 360 Annual Meeting, Miami Beach, FL.
- ◆ Girshfeld, S., Macknofsky, B., Lama, G., Fomunung, C., Fernandez, C., **Routman, H.**, Sabesan, V. J. (2023, Jan 27-28). *Effect of Steroid Injections on Outcomes following Shoulder Arthroplasty*. Poster session. Winter Technology & Innovation in Orthopaedics Annual Meeting, Fort Lauderdale, FL.
- ◆ Mohamed, A. A., Johansen, P., Fernandez, C., Fomunung, C., Elkhechen, J., **Routman, H.**, Sabesan, V. J. (2022, Oct 27-29). *Determinants of Reverse Shoulder Arthroplasty Failure*. Poster session. Eastern Orthopaedic Association Annual Meeting, Naples, FL.
- ◆ Girshfeld, S., Lama, G., Pallissery, W., Lavin, A. C., **Routman, H. D.**, Sabesan, V. J. (2022, Sep 7-9). *Are Steroid Injections Correlated with Worse Preoperative Pain and Function in Shoulder Arthroplasty?* Poster session. European Society for Surgery of the Shoulder and the Elbow Annual Meeting, Dublin, Ireland.
- ◆ Girshfeld, S., Lama, G., Pallissery, W., Lavin, A. C., **Routman, H. D.**, Sabesan, V. J. *Rate of Recovery for Augmented Reverse Shoulder Arthroplasty*. Poster session. Eastern Orthopaedic Association Annual Meeting, (2022, Oct 27-29), Naples, FL; European Society for Surgery of the Shoulder and the Elbow Annual Meeting, (2022, Sep 7-9), Dublin, Ireland.
- ◆ Girshfeld, S., Lama, G., Pallissery, W., Lavin, A. C., **Routman, H. D.**, Sabesan, V. J. (2022, Sep 7-9). *Do Prior Steroid Injections Affect Outcomes of Arthroscopic RCRs?* Poster session. European Society for Surgery of the Shoulder and the Elbow Annual Meeting, Dublin, Ireland.

- ◆ Yerke-Hansen, P. N., Lavin, A. C., **Routman, H. D.**, Sabesan, V. J. (2022, Jul 20-23). *Revision Reverse Shoulder Arthroplasty: Is a Diagnosis of Infection Worse?* Poster session. Southern Orthopaedic Association Annual Meeting; White Sulphur Springs, WV.
- ◆ **Routman, H. D.**, Friedman, R. J., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Roche, C. P. (2018). *Analysis of Factors Associated with Acromial and Scapular Fractures After rTSA*. Poster session. European Society for Surgery of the Shoulder and Elbow, Geneva, Switzerland.
- ◆ **Routman, H. D.**, Friedman, R. J., Flurin, P. H., Wright, T. W., Zuckerman, J. D., Roche, C. P. (2018). *Comparison of rTSA Clinical Outcomes in Patients with and without Scapular Notching*. Poster session. European Society for Surgery of the Shoulder and Elbow, Geneva, Switzerland. [Best Poster Award Finalist].
- ◆ **Routman, H. D.**, Friedman, R. J., Roche, C. P., Parsons, I. M. (2018). *Variables Correlating with Ultimate Improvement of Active External Rotation in Reverse Total Shoulder Arthroplasty*. Poster session. American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA.
- ◆ Abdelshahed, M., Roche, C. P., Flurin, P. H., Zuckerman, J. D., Marczuk, Y., Simovitch, R. W., **Routman, H. D.**, Wright, T. W., Virk, M. (2017). *Short-term Outcomes Using Uncemented Humeral Components in Reverse Total Shoulder Arthroplasty*. Poster session. American Academy of Orthopaedic Surgeons Annual Meeting, San Diego, CA.
- ◆ Abdelshahed, M. A., Roche, C. P., Flurin, P. H., Kwon, Y. W., Zuckerman, J. D., Marczuk, Y., Simovitch, R. W., **Routman, H. D.**, Wright, T. W., Farmer, K., Virk, M. S. *Outcomes Using Posterior Augmented Reverse Total Shoulder Arthroplasty for Glenoid Wear: A Minimum Two-Year Follow-up Compared to Matched Control*. E-Poster #17. American Shoulder and Elbow Surgeons Annual Closed Meeting, Boston, MA.
- ◆ Routman, H. D. (2015). *IV Decadron and Intra-operative Exparel on Length of Stay, Narcotic Use and Pain Scores in Shoulder Arthroplasty*. Poster session. European Society for Surgery of the Shoulder and Elbow, Milan, Italy.
- ◆ Routman, H. D. (2013). *Asymmetric Tensioning of the Rotator Cuff by Changing Humeral Retroversion in Reverse Shoulder Arthroplasty*. Poster session. Orthopedic Research Society Annual Meeting.
- ◆ Routman, H. D. (2013). *Biomechanical Analysis of 3 Commercially Available Reverse Shoulder Designs in a Normal and Medially Eroded Scapula*. Poster session. Orthopedic Research Society Annual Meeting.
- ◆ Routman, H. D. (2013). *Correlation of Reverse Shoulder Implant Positioning with Scapular Notching and Bone Spurs, Minimum Follow-up of Two Years*. Poster session. Orthopedic Research Society Annual Meeting.
- ◆ Routman, H. D. (2013). *The Effect of Reverse Shoulder Design on the Moment Arms of Muscles Surrounding the Joint During External Rotation*. Poster session. Orthopedic Research Society Annual Meeting.
- ◆ Routman, H. D. (2012). *Scapular Notching Radiographic Analysis: Recommendations for Glenoid Plate Positioning and Glenosphere Overhang in Male and Female Patients*. Poster session. Orthopedic Research Society Annual Meeting.
- ◆ Routman, H. D. (2012). *Scapular Notching Radiographic Analysis and Recommendations to Avoid Notching*. Poster session. European Federation of National Associations of Orthopaedics and Traumatology, Berlin, Germany.
- ◆ Routman, H. D. (2012). *Reverse Shoulder Radiographic Analysis and Recommendations to Avoid Scapular Notching*. Poster session. German Association of Shoulder and Elbow Surgery.
- ◆ Routman, H. D. (2012). *Effect of Reverse Shoulder Design Philosophy on the Biomechanics of the Deltoid and Rotator Cuff Muscles*. Poster session. British Elbow and Shoulder Society; European Society for Surgery of the Shoulder and Elbow, Dubrovnik, Croatia.
- ◆ Routman, H. D. (2012). *Glenoid Fixation Using an 8, 12, and 16° Posteriorly Augmented Cemented Glenoid Prosthesis*. Poster session. European Society for Surgery of the Shoulder and Elbow, Dubrovnik, Croatia.
- ◆ Routman, H. D. (2011). *Radiographic Evaluation of a Novel Reverse Shoulder Prosthesis: A Report of Complications with a Minimum 2-year Follow-up*. Poster session. European Society for Surgery of the Shoulder and Elbow, Lyon, France.
- ◆ Routman, H. D. (2002, February). *Combination Rotator Cuff Repair and Total Shoulder Arthroplasty – Results*. Poster session. American Academy of Orthopaedic Surgery Annual Meeting, Dallas, TX.

DOMESTIC PRESENTATIONS

- ◆ Routman, H. D. (2024, April). Faculty/ Presenter. *How to Manage Humeral Bone Loss*. American Osteopathic Academy of Orthopedic Annual Meeting, Las Vegas, NV.

- ◆ Goguen, J., Forbes, J., Jackson, G. R., **Routman, H.**, Sabesan, V. J. (2023, Sep 27-30). Presenter. *Reverse Shoulder Arthroplasty for Proximal Humeral Fractures: Better Treated Acute versus Chronic Malunions*. International Society for Technology in Arthroplasty Annual Meeting, New York City, NY.
- ◆ Lack, B., Girshfeld, S., Lama, G., Macknofsky, B., Fomunung, C. F., John, D. Q., Jackson, G. R., **Routman, H. D.**, Sabesan, V. J. (2023, Sep 27-30). *Effects of Steroid Injections on Outcomes Following Shoulder Arthroplasty*. International Society for Technology in Arthroplasty Annual Meeting, New York City, NY.
- ◆ Jackson, G. R., Brusalis, C. M., Mowers, C. C., Daji, A., Sabesan, V. J., **Routman, H. D.** (2023, Sep 22-23). Presenter. *Prior Shoulder Arthroscopy is Associated with Inferior Clinical Outcomes Following Primary Reverse Shoulder Arthroplasty*. Orthopaedic Summit Evolving Techniques Annual Meeting, Boston, MA.
- ◆ Routman, H. D. (2023, August). Faculty. *Inlay/ Onlay: The Debate that Isn't*. Exactech Shoulder Clinicians Meeting, Charleston, SC.
- ◆ Kushner, J., Sabesan, V.J., Fomunung, C., Elkechen, J., Fernandez, C., **Routman, H.** (2023, Apr 19-23). *The Return to Activity for Patients Undergoing Revision RSA*. Mid-Atlantic Orthopaedic Association Annual Meeting, Miramar Beach, FL.
- ◆ Redden, A., Sabesan, V. J., Grishfeld, S., Pallissery, W., Lama, G., Baran, J., Kushner, J., Fernandez, C., Lavin, A., **Routman, H.** (2023, Apr 19-23). *Effect of Steroid Injections on Preoperative Pain and Function Prior to Shoulder Arthroplasty*. Mid-Atlantic Orthopaedic Association Annual Meeting, Miramar Beach, FL.
- ◆ Sabesan, V. J., Kane, K., Mohamed, A. A., Redden, A., Fomunung, C., Elkhechen, J., Fernandez, C., **Routman, H.** (2022, Oct 27-29). *Who Fails Conservative Treatment? Predicting the Need for Arthroscopic Rotator Cuff*. Eastern Orthopaedic Association Annual Meeting, Naples, FL.
- ◆ Sabesan, V. J., Lavin, A., Lama, G., Girshfeld, S., Macknofsky, B., **Routman, H.** (2022, Aug 31 – Sep 3). *Do Steroid Injections Affect Outcomes of Shoulder Arthroplasty? Why Risk It?* International Society for Technology in Arthroplasty Annual Meeting, Maui, HI.
- ◆ Ogunfuwa, F., Desai, A., Lavin, A., Fomunung, C., Elkhechen, J., **Routman, H.**, Sabesan, V. J. (2022, Jun 23-26). *Acromiobumeral Distance: Is There a Correlation with Outcomes After Reverse Shoulder Arthroplasty?* Florida Orthopaedic Society Annual Meeting, Palm Beach, FL.
- ◆ Khoury, L., Pallissery, W., Lavin, A., **Routman, H.**, Sabesan, V. J. (2022, Apr 6-10). *Better Outcomes? Rotator Cuff Repair vs. Reverse Shoulder Arthroplasty for Massive Rotator Cuff Tears*. Mid-Atlantic Orthopaedic Association Annual Meeting, San Antonio, TX.
- ◆ Sabesan, V. J., Chatha, K., Lima, D. L., Yawman, J. P., Khoury, L., Lavin, A., **Routman, H.** *Equal Care for All? Do Surgical Outcomes in Shoulder Arthroplasty Depend on Insurance Type?* Southern Orthopaedic Association Annual Meeting, (2021, Jul 21-24), Isle of Palm, SC; Florida Orthopaedic Society Annual Meeting, (2021, May 13-16), Tampa, FL.
- ◆ Routman, H. D. (2021, April) Faculty/ Presenter. *Acromial and Scapular Fractures After Reverse Shoulder Arthroplasty*. American Osteopathic Academy of Orthopedic Surgeons Spring Meeting, Salt Lake City, UT.
- ◆ Routman, H. D. (2018) Faculty/ Presenter. *Efficiency at Home*. Symposium IV. Association of Clinical Elbow and Shoulder Surgeons 14th Annual Meeting, Lake George, NY.
- ◆ Routman, H. D. (2017). Faculty/ Presenter. *Difficult Arthroplasty Cases Where I Used PSI, Augments, etc. to Accomplish My Goals*. Symposium IV. Association of Clinical Elbow and Shoulder Surgeons 13th Annual Meeting, Scottsdale, AZ.
- ◆ Routman, H. D. (2017). Presenter. *How-To Videos: Management of Glenoid Bone Loss in RTSA – With Metal*. American Shoulder and Elbow Surgeons Specialty Day Meeting, San Diego, CA.
- ◆ Routman, H. D. (2015). Faculty/ Presenter. *Case Review and Difficult Case Discussion Panel*. American Osteopathic Academy of Orthopedics Mid-Year Meeting, Amelia Island, FL.
- ◆ Routman, H. D. (2015). Presenter. *Evaluation of the Painful Reverse – Use of SPECT-CT*. Association of Clinical Elbow and Shoulder Surgeons 11th Annual Meeting, Scottsdale, AZ.
- ◆ Routman, H. D. (2015). Faculty/ Presenter. *The Glenoid: When, Why and How*. American Osteopathic Academy of Orthopedics Annual Meeting, Colorado Springs, CO.
- ◆ Routman, H. D. (2015). Presenter. *The Impact of Intravenous Dexamethasone and Local Liposomal Bupivacaine on Shoulder Arthroplasty Length of Stay, Pain Scores and Narcotic Usage*. American Shoulder and Elbow Surgeons Annual Closed Meeting & Southern Orthopaedic Association 32nd Annual Meeting, Asheville, NC.

- ◆ Routman, H. D. Faculty/ Presenter. *The Role of the Subscapularis in Reverse Shoulder Arthroplasty*. American Osteopathic Academy of Orthopedics Mid-Year Meeting, (2015), Amelia Island, FL; Advanced Concepts in Orthopaedics Medicine and Sport Medicine, (2014), Las Vegas, NV.
- ◆ Routman, H. D. Faculty. *Comparative Biomechanics of Reverse Designs*. Shoulder Arthroplasty Masters Course. (2014, August), Jackson Hole, WY; (2013, July), Denver, CO.
- ◆ Routman, H. D. (2014, August). Faculty. *The Harmful Effect of Subscapularis Repair in Reverse Shoulder Arthroplasty – A Debate*. Shoulder Arthroplasty Masters Course. Jackson Hole, WY.
- ◆ Routman, H. D. (2014, February). Faculty. *Reverse Shoulder Arthroplasty Biomechanics*. Medical Education Course. Exactech Equinox Platform, Houston, TX.
- ◆ Routman, H. D. Faculty. *Reverse Shoulder Arthroplasty Design Rationale*. Medical Education Course. Exactech Equinox Platform, (2014, February), Houston, TX; Clinical Pearls and Pitfalls, (2011, September), Miami, FL.
- ◆ Routman, H. D. (2014, Jan – Dec), (2013, Jan – Dec), (2012, Jan – Dec), (2011, Jan – Dec), (2010, Jan – Dec), (2009, Jan – Dec). Host/ Speaker/ Program Director. *Evolution of Modern Shoulder Arthroplasty*. Lecture and Live Surgical Demonstration, Surgical Skills Laboratory Instruction, Case Review. Palm Beach Shoulder Service: Visiting Surgeon Program, Visiting Surgeons from US and Abroad.
- ◆ Routman, H. D. (2014). Presenter. *Panel: Reverse Total Shoulder Arthroplasty Complications*. Association of Clinical Elbow and Shoulder Surgeons 10th Annual Meeting, Maui, HI.
- ◆ Routman, H. D., & Flurin, P. H. (2013, July). Faculty. *Debate: The Subscapularis is Harmful to Reverse Shoulder Arthroplasty*. Shoulder Arthroplasty Masters Course. Denver, CO.
- ◆ Routman, H. D. (2013, July). Faculty. *Indications for Reverse Shoulder Replacement in Proximal Humerus Fractures*. Shoulder Arthroplasty Masters Course. Denver, CO.
- ◆ Routman, H. D. Faculty. *Comprehensive Approach to Glenohumeral Joint Exposure for Arthroplasty*. Medical Education Course. Exactech Equinox Platform, (2013, June), Portland, ME; (2013, May), Miami, FL; (2013, March), Tulsa, OK; (2012, November), Henderson, NV; (2012, June), Chicago, IL; (2012, February), Miami, FL; (2012, January), Salt Lake City, UT.
- ◆ Routman, H. D. (2013, June). Faculty. *The Difficult Glenoid*. Medical Education Course. Exactech Equinox Platform, Portland, ME.
- ◆ Routman, H. D. (2013, March). Faculty. *Comparative Biomechanics of Reverse Shoulder Arthroplasty Design – Implications for Stability, Deltoid and Residual Rotator Cuff Efficiency*. Exactech Equinox Platform: Clinical Evaluator Meeting, Tulsa, OK.
- ◆ Routman, H. D. Faculty. *Management of Glenoid Deformity in Primary and Reverse Shoulder Arthroplasty*. Medical Education Course. Exactech Equinox Platform, (2013, March), Tulsa, OK; (2012, December), San Francisco, CA.
- ◆ Routman, H. D. Faculty/ Presenter. Laboratory Instructor. *Reverse Shoulder Arthroplasty*. American Academy of Orthopaedic Surgeons Annual Meeting, (2013, March), Chicago, IL; (2011, February), San Diego, CA.
- ◆ Routman, H. D. (2013, March). Faculty/ Presenter. *Rotator Cuff Repair: Surgical Skills*. Laboratory Instructor. American Academy of Orthopaedic Surgeons Annual Meeting, Chicago, IL.
- ◆ Routman, H. D. (2013, March). Presenter. *Scapular Notching in Reverse Shoulder Arthroplasty: Radiographic Analysis of Implant Position in Male and Female Patients*. Round Table Discussion. Summary of Recently Accepted Original Research by Journal of Bone and Joint Surgery British. Exactech Equinox Platform: Clinical Evaluator Meeting, Chicago, IL.
- ◆ Routman, H. D. (2013, January). Presenter. *State of the Shoulder Worldwide Shoulder Market*. Exactech National Sales Meeting, Keynote Shoulder Address, Amelia Island, FL.
- ◆ Routman, H. D. (2013). Presenter. *80 yr Old with OA and an Intact Rotator Cuff: TSA versus Reverse*. Association of Clinical Elbow and Shoulder Surgeons 9th Annual Meeting, Scottsdale, AZ.
- ◆ Routman, H. D. (2013). Faculty/Presenter. *Reverse Shoulder Biomechanics*. American Osteopathic Academy of Orthopaedics Mid-year Meeting, Miami, FL.
- ◆ Routman, H. D. (2012, October). Presenter. *A Breakdown of the Most Common Shoulder Problems that You May See in a Primary Care Setting*. Educational Lecture to Primary Care Residents. Columbia Hospital Residency Program, West Palm Beach, FL.
- ◆ Routman, H. D. Presenter. *What Your Shoulder Pain is Telling You*. Educational Series. JFK Medical Center Community Outreach, (2012, September), (2011, October), Palm Beach, FL; Palm Beach Jewish Community Center Health Fair, (2012, January), Palm Beach, FL.

- ◆ Routman, H. D. (2012, August). Presenter. *Biomechanical Breakdown of Reverse Designs*. Association of Clinical Elbow and Shoulder Surgeons Annual Meeting, Whitefish, MT.
- ◆ Routman, H. D. (2012, June). Faculty. *Biomechanics of Reverse Shoulder Designs – How to Understand It*. Salesforce Advanced Shoulder Training Program. Chicago, IL.
- ◆ Routman, H. D. (2012, March). Presenter. *Breakdown of the Shoulder System from the Surgeon's Point of View*. Salesforce Advanced Shoulder Training Program. Exactech Corporate, Gainesville, FL.
- ◆ Routman, H. D. Faculty. *Live Cadaveric Surgical Demonstration and Instruction*. Medical Education Course. Exactech Equinox Platform, (2012, February), Miami, FL; (2012, January), Salt Lake City, UT; (2011, September), Miami, FL.
- ◆ Routman, H. D. (2012, February). Presenter. *Primary Total Shoulder Replacement Design Rationale: Thought Process Behind the Equinox Shoulder System*. Kansas City Exactech Distribution, Kansas City, MO.
- ◆ Routman, H. D. (2012, February). Presenter. *Reverse Total Shoulder Design Rationale with Outcomes*. Kansas City Exactech Distribution, Kansas City, MO.
- ◆ Routman, H. D. (2011, November). Presenter. *Biceps Tenodesis: My Preferred Technique*. Association of Clinical Elbow and Shoulder Surgeons Annual Meeting, Palm Beach, FL.
- ◆ Routman, H. D. (2011, April). Faculty/ Presenter. *Achieving OR Efficiency: Advanced Techniques in Total Knee Arthroplasty AND Mastering the Reverse Shoulder, Glenoid Exposure and Proximal Humerus Fracture*. Exactech, Henderson, NV.
- ◆ Routman, H. D. (2011, April). Faculty/ Presenter. *Total Shoulder Replacement, Reverse Shoulder Replacement, Glenoid Exposure, Avoidance of Surgical Misadventure*. Advanced Shoulder Training. Exactech, Henderson, NV.
- ◆ Routman, H. D. (2011, March). Faculty/ Presenter. *Total Shoulder Replacement, Reverse Shoulder Replacement, Glenoid Exposure, Avoidance of Surgical Misadventure*. Surgical Skills Lab. Exactech, Dallas, TX.
- ◆ Routman, H. D. (2011, February). Presenter. *Design Rationale of the Proximal Humerus Fracture Plate*. Exactech Clinical Evaluator Meeting, San Diego, CA.
- ◆ Routman, H. D. (2011, January). Presenter. *How to Improve Glenoid Exposure*. Breakout Sessions for Sales Force. Exactech National Sales Meeting, Las Vegas, NV.
- ◆ Routman, H. D. (2011, January). Presenter. *Shoulder Arthroplasty: 2011 and beyond*. Key Shoulder Address. Exactech National Sales Meeting, Las Vegas, NV.
- ◆ Routman, H. D. Presenter. *Modern Shoulder Reconstruction*. Education Series. (2010, November), MorseLife Rehabilitation Facility; (2010, September), Breakfast with the Doctor, JFK Medical Center Community Outreach Program.
- ◆ Routman, H. D. (2010, October). Faculty. *What Primary Care Physicians Need to Know About the Shoulder*. House Staff Education Series. Nova-Southeastern University College of Osteopathic Medicine, Columbia Hospital Campus.
- ◆ Routman, H. D. (2010, March). Faculty/ Presenter. *Reverse Shoulder Replacement Lab*. American Academy of Orthopedic Surgeons Annual Meeting, New Orleans, LA.
- ◆ Routman, H. D. (2009, November). Lecturer. *Avoiding Pitfalls in the Management of Work-Related Shoulder Injuries*. Florida Workers Compensation Institute, Orlando, FL.
- ◆ Routman, H. D. (2009, August), (2008, August). Faculty. *Evolution of a Modern Anatomic Shoulder Prosthesis, from Fracture to Reverse*. Advanced Concepts in Orthopaedics and Sports Medicine, Las Vegas, NV.
- ◆ Routman, H. D. (2009, March). Faculty. *Investigational Design and Cadaver Implantation of a New Fracture Plate*. Orlando, FL.
- ◆ Routman, H. D. (2009, March). Lecturer. *Shoulder Update for Therapists*. Medica Assisted Living, Lake Worth, FL.
- ◆ Routman, H. D. (2009, February). Faculty. *Live Cadaver Experience for Brazilian Surgeons*, Las Vegas, NV.
- ◆ Routman, H. D. (2009, February). Faculty. *Evolution of the Shoulder Prosthesis*. Design Meeting. Las Vegas, NV.
- ◆ Routman, H. D. Lecturer/ Guest Speaker. *Shoulder Update for Injured Workers*. Town of Palm Beach, (2009, February), (2008, October), Palm Beach, FL; Cambridge TPA, (2008, October), Fort Lauderdale, FL.
- ◆ Routman, H. D. (2009, January) Faculty. *Improving Your Shoulder IQ*. Shoulder Breakout Session. Exactech: National Sales Meeting, Palm Beach Gardens, FL.
- ◆ Routman, H. D. (2008, August). Faculty. *Pitfalls in the Management of Work-Related Shoulder Injuries: Routine to Catastrophic*. 63rd Annual Workers Compensation Educational Conference, Orlando, FL.

- ◆ Routman, H. D. (2007, October). Faculty. *Total Shoulder Arthroplasty. Information for Board Recertification*. Annual Meeting of the American Osteopathic Academy of Orthopedics, San Francisco, CA.
- ◆ Routman, H. D. Lab Instructor. *Cadaver Dissection and Demonstration of Surgical Technique for Total Shoulder Arthroplasty and Reverse Ball and Socket Arthroplasty*. Lab. (2007, August), (2007, April), (2006, November), Gainesville, FL; (2007, August), Oklahoma City, OK.
- ◆ Routman, H. D. (2007, August). Lecturer. *Design Rationale and Technique of Implantation of Exactech Equinoxe Primary and Fracture Stem Shoulder Replacement*. Lecture. (2007, August), Oklahoma City, OK; Advances in Orthopaedic Surgery Annual Meeting, (2006, December), Coral Gables, FL.
- ◆ Routman, H. D. (2007, May), (2006, September), (2006, May). Lab Instructor/ Lecturer/ MiTek Faculty. *Disorders of the Long Head of the Biceps Tendon Evaluation and Treatment*. Lecture. *Surgical Techniques for Arthroscopic Rotator Cuff Repair; Arthroscopic Instability, Arthroscopic Decompression and Clavicle Excision*. Lab. Las Vegas, NV.
- ◆ Routman, H. D. (2007, March), (2006, March). Lecturer. *Advances in Shoulder Reconstruction*. Lecture. Community Education Series for the Human Motion Institute, Palm Beach County, FL.
- ◆ Routman, H. D. (2007, January). Lecturer. *Design Rationale and Competitive Comparison of Exactech Equinoxe to the Existing Portfolio of Shoulder Implants Used in the USA*. Exactech Sales Force Annual Meeting, Palm Beach Gardens, FL.
- ◆ Routman, H. D. (2006, June). Faculty/ Lab Instructor. *Reverse Ball and Socket Arthroplasty: My Experiences So Far*. Lecture. *Techniques of Reverse Ball and Socket Arthroplasty (Encore) Live Demonstration on Cadaver*. Lab. Orthopaedic Learning Center, Rosemont, IL.
- ◆ Routman, H. D. (2006, May). Faculty/ Presenter. *Reverse Ball and Socket Replacement: Pitfall and Pearls*. Annual Clinical Assembly of the American College of Osteopathic Surgeons, American Osteopathic Academy of Orthopedics Annual Meeting, Chicago, IL
- ◆ Routman, H. D. (2005, October). Faculty/ Presenter. *Reverse Ball and Socket Arthroplasty of the Shoulder for Rotator Cuff Deficient Arthritis, Basic Science, Surgical Techniques, Results*. Annual Clinical Assembly of the American College of Osteopathic Surgeons, American Osteopathic Academy of Orthopedics Annual Meeting, Orlando, FL.
- ◆ Routman, H. D. (2005, February). Faculty/ Presenter. *Locking Compression Plates: Indications and Techniques in Proximal Humerus Fractures*. Treatment Options for Difficult Fractures Symposium, Weston, FL.
- ◆ Routman, H. D. Lecturer. *Understanding Shoulder Pain*. Columbia Hospital Community Education Series, (2005, February), West Palm Beach, FL; JFK Medical Center Joint Sessions Community Educational Effort, (2004, March), Atlantis, FL; JFK Medical Center Community Education Series, (2004, February), Atlantis, FL; Valencia Falls Visiting Doctor Series, (2004, January), Delray Beach, FL; JFK Medical Center Community Education Series, (2003, December), Atlantis, FL.
- ◆ Routman, H. D. (2005, January). Lecturer. *Shoulder Arthritis*. JFK Medical Center Community Education Series, Atlantis, FL.
- ◆ Routman, H. D. (2004, November). Faculty. *Shoulder Reconstruction*. MiTek Instructional Laboratory, Celebration, FL.
- ◆ Routman, H. D. (2004, August). Faculty. *Bone Healing and COX-2 NSAIDs*. Orlando Orthopaedic Society Annual Meeting, Orlando, FL.
- ◆ Routman, H. D. (2004, May). Presenter. *Mini-Open Assisted Arthroscopic Rotator Cuff Repair in Patients with Large and Massive Tears Using a Double Row Fixation Technique*. 9th International Congress on Surgery of the Shoulder, Washington, DC.
- ◆ Routman, H. D. (2004, May). Faculty/ Presenter. *NSAIDs and Bone Healing – What Do We Know?* Florida Orthopaedic Society Annual Meeting, Key Largo, FL.
- ◆ Routman, H. D. (2004, March). Lecturer. *COX-2 and Bone Healing Pain Applications for Orthopaedic Surgeons*. Northeast Florida Orthopaedic Society, Jacksonville, FL.
- ◆ Routman, H. D. (2004, February). Lecturer. *Multi-modal Approach to Pain Management and Bone Healing Issues with COX-2 NSAIDs*. Pfizer, Boca Raton, FL.
- ◆ Routman, H. D. (2004, February). Faculty/ Presenter. *Orthopaedic Board Review – Fractures and Orthopaedic Emergencies*. Florida Academy of Physician Assistants: Annual Meeting and Board Review, Orlando, FL.
- ◆ Routman, H. D. (2004, January). Faculty/ Presenter. *Trauma for the General Surgeon: Clearing the Cervical Spine*. Seminar Review. American College of Osteopathic Surgeons, Las Vegas, NV.
- ◆ Routman, H. D. (2004, January). Faculty/ Presenter. *Trauma for the General Surgeon: Management of the Mangled Extremity*. Seminar Review. American College of Osteopathic Surgeons, Las Vegas, NV.

- ◆ Routman, H. D. Lecturer. *Multi-Modal Pain Applications: COX-2 Agents*. West Palm Beach Veterans Administration Medical Staff, (2003, September), West Palm Beach, FL; Pfizer, (2003, August), West Palm Beach, FL.
- ◆ Routman, H. D. (2003, February). Lecturer. *Slap Lesions and the Overhead Athlete*. Palm Beach County Physical Therapy Alliance, West Palm Beach, FL.
- ◆ Routman, H. D. Faculty. *COX-2 Review – Effects on Bone Healing*. Consultant Market Panel for Pharmacia, (2002, October), Tampa, FL; Orthopaedic Consultant Market Panel for Pfizer, (2002, January), Jacksonville, FL.
- ◆ Routman, H. D. (2002, September). Faculty/ Presenter. *The Effect of Full Thickness Rotator Cuff Tears on the Functional Outcome of Total Shoulder Arthroplasty*. Annual Clinical Assembly of Osteopathic Surgeons, Orlando, FL.
- ◆ Routman, H. D. (2002, March). Lecturer. *Bextra-A New Cox-2 Medication*. Pfizer, Palm Beach Gardens, FL.
- ◆ Routman, H. D. (2001, May). Lecturer. *Shouldering the Web*. Hughston Society Annual Meeting, Columbus, GA.
- ◆ Routman, H. D. (1999, 1998). Lecturer. *Common Pediatric Fractures*. 2nd Year Medical Student Class. Philadelphia College of Osteopathic Medicine, Philadelphia, PA.
- ◆ Routman, H. D. (1999). *Intramedullary Fixation for Pediatric Both-bone Forearm Fractures*. Review of case report. Scientific exhibit at the Annual Clinical Assembly of Osteopathic Specialists. Suburban General Hospital, Norristown, PA; St. Christopher's Hospital for Children, Philadelphia, PA.
- ◆ Routman, H. D. (1998). Lecturer. *Acetabular Fractures*. Resident Lecture Series. Philadelphia College of Osteopathic Medicine Department of Orthopaedics, Philadelphia, PA.
- ◆ Routman, H. D. (1998). Lecturer. *Carpal Instability*. Resident Lecture Series. Philadelphia College of Osteopathic Medicine Department of Orthopaedics, Philadelphia, PA.
- ◆ Routman, H. D. (1998). Lecturer. *Elbow Arthroplasty*. Resident Lecture Series. Philadelphia College of Osteopathic Medicine Department of Orthopaedics, Philadelphia, PA.
- ◆ Routman, H. D. (1998). Lecturer. *Physcal Injuries*. Resident Lecture Series. Philadelphia College of Osteopathic Medicine Department of Orthopaedics, Philadelphia, PA.
- ◆ Routman, H. D. (1997). Lecturer. *Knee Dislocations*. Resident Lecture Series. Philadelphia College of Osteopathic Medicine Department of Orthopaedics, Philadelphia, PA.
- ◆ Routman, H. D. (1997). Lecturer. *Free Nerve Grafting*. Resident Lecture Series. Ohio University College of Osteopathic Medicine Department of Orthopaedics: Doctor's Hospital, Columbus, OH.
- ◆ Routman, H. D. (1997). Lecturer. *Intertrochanteric Osteotomy*. Resident Lecture Series. Ohio University College of Osteopathic Medicine Department of Orthopaedics: Doctor's Hospital, Columbus, OH.

INTERNATIONAL PRESENTATIONS

- ◆ Routman, H. D. (2024, July). Invited Speaker. *Future of AI in Shoulder Arthroplasty*. EME Rome, Rome, Italy.
- ◆ Routman, H. D. (2024, July). Invited Speaker. *Short Stem Arthroplasty*. EME Rome, Rome, Italy.
- ◆ Routman, H. D. (2024, July). Invited Speaker. *Small Baseplate Technology in Reverse Shoulder Replacement*. EME Rome, Rome, Italy.
- ◆ Routman, H. D. (2024, July). Speaker. *Lateralized Implant: In Favor of the Lateralized Humeral Component*. Gladiator in the Arena: Shoulder Arena Course. Domus Circo Massimo, Rome, Italy.
- ◆ Routman, H. D. (2024, July). Speaker. *Navigation versus PSI: In Favor of Navigation*. Gladiator in the Arena: Shoulder Arena Course. Domus Circo Massimo, Rome, Italy.
- ◆ Routman, H. D. (2024, February). Invited Speaker. *Biomechanics of Shoulder Arthroplasty*. EME Australia, Gold Coast, Australia.
- ◆ Routman, H. D. (2024, February). Invited Speaker. *Bone Preservation and Reconstruction on the Humeral Side of Shoulder Arthroplasty*. EME Australia, Adelaide, Australia; Brisbane, Australia; Melbourne, Australia; Perth, Australia; Sydney, Australia.
- ◆ Routman, H. D. (2024, February). Invited Speaker. *Hybrid Laser 3D Printed Titanium Glenoid Technology*. EME Australia, Adelaide, Australia; Brisbane, Australia; Melbourne, Australia; Perth, Australia; Sydney, Australia.
- ◆ Routman, H. D. (2024, February). Invited Speaker. *The Future of AI Assisted Shoulder Decision Making in Shoulder Arthroplasty*. EME Australia. Adelaide, Australia; Brisbane, Australia; Melbourne, Australia; Perth, Australia; Sydney, Australia.
- ◆ Routman, H. D. (2023, May). Faculty. *How Active Intelligence Can Help Us with Soft Tissue*. Exactech Shoulder Masters Course, Amsterdam, Netherlands.

- ◆ Routman, H. D. (2023, May). Faculty/ Moderator. *Table Case Review*. Exactech Shoulder Masters Course, Amsterdam, Netherlands.
- ◆ Routman, H. D. (2021, May). International Guest. *How to Manage the Infected Prosthesis. When Only Debridement is Enough and When is Necessary to Revise (One or Two Steps)*. 4th CICOC Shoulder and Elbow Surgery Course of the Universities from Sao Paulo. Sao Paulo, Brazil.
- ◆ Routman, H. D. (2021, May). International Guest. *Re-Live Surgery Treatment of an Infected Prosthesis*. 4th CICOC Shoulder and Elbow Surgery Course of the Universities from Sao Paulo. Sao Paulo, Brazil.
- ◆ Routman, H. D. (2018, May). Faculty/ Moderator. *Augmented Anatomic Total Shoulder Arthroplasty Outcomes*. Exactech Shoulder Masters Course, Madrid, Spain.
- ◆ Routman, H. D. (2018, May). Faculty/ Moderator. *Biomechanics of the Shoulder: Anatomic Total Shoulder Arthroplasty vs Reverse Total Shoulder Arthroplasty*. Exactech Shoulder Masters Course, Madrid, Spain.
- ◆ Routman, H. D. (2018, May). Faculty/ Moderator. *State of Shoulder Arthroplasty: Past, Present and Future*. Exactech Shoulder Masters Course, Madrid, Spain.
- ◆ Routman, H. D. (2018, March). Invited Speaker. *Reverse Shoulder Arthroplasty for Proximal Humerus Fractures – My Experience*. Canberra, Australia.
- ◆ Routman, H. D. (2018, March). Invited Speaker. *Relevant Biomechanics of Reverse Total Shoulder Replacement*. Sydney, Australia.
- ◆ Routman, H. D. (2018, March). Invited Speaker. *Shoulder Arthroplasty Design Rationale*. Brisbane, Australia.
- ◆ Routman, H. D. (2018, March). Invited Speaker. *Guided Personalized Surgery – Computer-assisted Navigation in Shoulder Replacement Surgery*. Melbourne, Australia.
- ◆ **Routman, H. D.**, Friedman, R. J., Zuckerman, J. D., Wright, T. W., Flurin, P. H., Roche, C. P. (2018). Presenter. *Comparison of Clinical Outcomes with Reverse Shoulder Arthroplasty in Patients with and without Scapular Notching*. Poster session. European Shoulder and Elbow Society 28th Annual Meeting. Geneva, Switzerland. [Best Presentation Finalist].
- ◆ **Routman, H. D.**, Hinson, J., Roche, C. P., Simovitch, R.W. (2018). Presenter. *The Impact of Formal versus Informal Rehabilitation on Improvement After Primary rTSA for Rotator Cuff Deficient Arthritis*. European Society of Shoulder and Elbow Rehabilitation. Geneva, Switzerland.
- ◆ Routman, H. D. (2016). Chairman of Section OP 8 (Shoulder) Arthritis and Arthroplasty. 13th International Congress on Shoulder and Elbow Surgery, Jeju, South Korea.
- ◆ **Routman, H. D.**, Boltuch, A., Moor, M., Israel, L. (2016). Presenter. *Liposomal Marcaine Combined with Intravenous Decadron Results in Decreased Length of Hospital Stay and Decreased Narcotic Usage After Elective Shoulder Arthroplasty*. 13th International Congress on Shoulder and Elbow Surgery, Jeju, South Korea.
- ◆ Roche, C., Hamilton, M., Diep, P., Wright, T., Flurin, P.H., Zuckerman, J.D., **Routman, H.D.** (2016). *Optimizing Deltoid Efficiency with Reverse Shoulder Arthroplasty Using a Novel Inset Center of Rotation Glenosphere Design*. Co-Presenter. 13th International Congress on Shoulder and Elbow Surgery, Jeju, South Korea.
- ◆ Routman, H. D., & Doo -Hyung, L. (2015, June). Guest Surgeon/ Visiting Professor. *First Exactech Reverse Shoulder Replacement for Fractures*. Exactech; Ajou University School of Medicine, Seoul, South Korea.
- ◆ Routman, H. D. (2015, June). Guest Surgeon/ Visiting Professor. *First Exactech Reverse Shoulder Replacement for Instability*. Exactech. Daegu, South Korea.
- ◆ Routman, H. D. (2015, June). Invited Speaker. *Reverse Shoulder Arthroplasty*. Round Table Discussion with Leading Korean Shoulder Surgeons. Seoul, South Korea.
- ◆ Routman, H. D. (2014, April). Faculty/ Moderator. *Live Panel Discussion – How Do You Expose the Glenoid*. Shoulder Arthroplasty Masters Course. Rio Di Janeiro, Brazil.
- ◆ Routman, H. D. (2014, April). Faculty/ Presenter. *The Subscapularis in Reverse Shoulder Arthroplasty*. Shoulder Arthroplasty Masters Course. Rio Di Janeiro, Brazil.
- ◆ Routman, H. D. (2013, June). Faculty/ Presenter. *Managing the Ugly Glenoid*. British Elbow and Shoulder Society Meeting; Exactech Clinical Evaluators Meeting, Leicester, UK.
- ◆ Routman, H. D. Faculty/ Presenter. *The Biomechanical Evolution of Reverse Shoulder Arthroplasty*. British Elbow and Shoulder Society Meeting; Exactech Clinical Evaluators Meeting, (2013, June), Leicester, UK; Advanced Shoulder Course, (2012, April), Naples, Italy.

- ◆ Routman, H. D. (2013, April). Presenter. *Asymmetric Tensioning of the Rotator Cuff by Changing Retroversion*. 12th International Congress on Shoulder and Elbow Surgery, Nagoya, Japan.
- ◆ Routman, H. D. (2013, April). Presenter. *Biomechanical Analysis of 3 Commercially Available Reverse Shoulder Designs*. 12th International Congress on Shoulder and Elbow Surgery, Nagoya, Japan.
- ◆ Routman, H. D. (2013, April). Presenter. *Effect of Reverse Shoulder Arthroplasty Design on Moment Arms*. 12th International Congress on Shoulder and Elbow Surgery, Nagoya, Japan.
- ◆ Routman, H. D. (2013, April). Invited Speaker. *Reverse Shoulder Arthroplasty- Design and Clinical Results*. Chinese Orthopaedic Infectious Disease Society, Guangzhou, China.
- ◆ Routman, H. D. (2013, April). Invited Speaker. *The Exactech Shoulder Platform*. Chinese Orthopaedic Infectious Disease Society, Guangzhou, China; Changchun, China; Shanghai, Beijing.
- ◆ Routman, H. D. (2012, September). Faculty. *Biomechanical Comparison of Three Reverse Shoulder Designs and the Impact on Range of Motion*. New Insights into Shoulder Arthroplasty. Dubrovnik, Croatia.
- ◆ Routman, H. D. (2012, September). Faculty. *Retrospective Study of Revision Shoulder Arthroplasty – With and Without Stem Removal*. New Insights into Shoulder Arthroplasty. Dubrovnik, Croatia.
- ◆ Routman, H. D. (2012, June). Faculty. *How to Make Sense of Reverse Shoulder Biomechanics*. Advanced Shoulder Training Program. Bordeaux, France.
- ◆ Routman, H. D. (2012, June). Faculty. *Impact on Subscapularis Repair on Outcomes in Reverse Shoulder Arthroplasty*. Shoulder Arthroplasty Masters Course. Bordeaux, France.
- ◆ Routman, H. D. (2012, June). Faculty. *Impact on Reverse Prosthesis Design on Torque Moments of the Shoulder*. Shoulder Arthroplasty Masters Course. Bordeaux, France.
- ◆ Routman, H. D. Faculty. *Live Surgery – Total Shoulder Arthroplasty*. Shoulder Arthroplasty Masters Course, (2012, June), Bordeaux, France; Advanced Shoulder Course, (2012, April), Naples, Italy.
- ◆ Routman, H. D. (2012, April). Faculty. *A Comprehensive Approach to Glenoid Exposure*. Advanced Shoulder Course, Naples, Italy.
- ◆ Routman, H. D. (2012, April). Faculty. *Live Surgery – Reverse Shoulder Arthroplasty*. Advanced Shoulder Course, Naples, Italy.
- ◆ Routman, H. D. (2012, April). Faculty. *Shoulder Arthroplasty: Philosophy and Surgical Approach in Equinoxe Shoulder System*. Omega Shoulder Meeting, Omega, Italy.
- ◆ Routman, H. D. (2011, September). Presenter. *Evolving Indications: Surgical Approaches and a Review of Reverse Shoulder Arthroplasty*. Exactech European Salesforce Advanced Shoulder Training Conference, Lyon, France.
- ◆ Routman, H. D. (2011, September). Presenter. *Expertise in Selling and Articulating Glenoid Exposure*. Exactech European Salesforce Advanced Shoulder Training Conference, Lyon, France.
- ◆ Routman, H. D. (2011, September). Presenter. *Fracture Plate Fixation: In-Depth Technical Training, Indications, and Technical Pearls*. Exactech European Salesforce Advanced Shoulder Training Conference, Lyon, France.
- ◆ Routman, H. D. (2011, September). Presenter. *Muscle Force Analysis Around Reverse Shoulder Arthroplasty – Preliminary Findings of a 2D Simulated Evaluation*. Exactech International Clinical Evaluator Meeting, Lyon, France.
- ◆ Routman, H. D. (2011, July). Presenter. *The Evolution of Modern Prosthetic Design – From Hemiarthroplasty to Reverse and Reverse for Fracture*. Melbourne, Australia; Perth, Australia; Sydney, Australia.
- ◆ Routman, H. D. (2012, September). Faculty. *Preparation for the Launch of the Equinoxe Reverse Total Shoulder System*. Brazilian Salesforce, Sao Paulo, Brazil.
- ◆ Routman, H. D. (2010, September). Presenter. *Proximal Humerus Locking Plate Fixation with Both Locking Screws and a Locking Blade: A Mechanical Evaluation in Composite Humeri*. 11th International Congress on Shoulder and Elbow Surgery, Edinburgh, Scotland.
- ◆ Routman, H. D. (2010, September). Guest Surgeon. *Total Shoulder Arthroplasty*. Volta Redonda Hospital, Rio Di Janeiro, Brazil; Sao Paulo Hospital, Sao Paulo, Brazil.
- ◆ Routman, H. D. (2009, May). Faculty/ Presenter. *Shoulder Arthroplasty Using the Exactech Shoulder System*. Lecture and Live Cadaver Demonstration. Curso Práctico en Técnicas de Abordaje en Cirugía del Miembro Superior: Hombro y Codo. (A Practical Course in Surgical Approach Techniques of Upper Extremities: Shoulder and Elbow), Barcelona, Spain.

OTHER LECTURES AND PRESENTATIONS

CME LECTURES

- ◆ Routman, H. D. (2024, September). Speaker. *The Future of AI in Shoulder Arthroplasty*. The John J. McPhilemy Endowed Annual Lecture: Philadelphia Orthopedic Society, Philadelphia, PA.
- ◆ Routman, H. D. (2024, August). Speaker. *Shoulder Injuries: When to get an MRI*. 78th Annual Workers' Compensation Educational Conference: Florida Orthopedic Society Breakout, Orlando, FL.
- ◆ Routman, H. D. (2024, June). Faculty. *I Have Been Doing This for Years – Optical Navigation is Best*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. (2024, June). Faculty. *Managing Proximal Humeral Fractures – Failed Fixation*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. (2024, June). Moderator Director/ Faculty. *Revision Shoulder Arthroplasty: Controversies and Challenges*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. (2024, May). Speaker. *AI/ML – What We Know?* Florida Orthopaedic Society Annual Scientific Meeting. Orlando, FL.
- ◆ Routman, H. D. (2024, May). Faculty. *All this RSA Talk: Can You Break It Down into the Basics. Augments, lateralization, etc.!!* Comprehensive Shoulder Course. Shoulder360, Miami, FL.
- ◆ Routman, H. D. (2024, May). Faculty. *Humeral Loss and Failure After rTSA – What is Next?* Comprehensive Shoulder Course. Shoulder360, Miami, FL.
- ◆ Routman, H. D. (2024, May). Faculty. *My Three Best and Worst Ideas in the Last 10 Years*. Comprehensive Shoulder Course. Shoulder360, Miami, FL.
- ◆ Routman, H. D. (2024, January). Moderator/ Faculty. *Choosing Optimal Implant Lateralization – Case Based Approach*. Course. Advanced Shoulder Arthroplasty, Salt Lake City, UT.
- ◆ Routman, H. D. (2024, January). Faculty. *Defining Implant Lateralization – Humeral, Glenoid and Global*. Course. Advanced Shoulder Arthroplasty, Salt Lake City, UT.
- ◆ Routman, H. D. (2024, January). Faculty. *Failed RSA Converted to Hemiarthroplasty: When How and What are the Outcomes*. Course. Advanced Shoulder Arthroplasty, Salt Lake City, UT.
- ◆ Routman, H. D. (2024, January). Faculty. *Panelist – AI and RSA- Is this the Future?* Course. Advanced Shoulder Arthroplasty, Salt Lake City, UT.
- ◆ Routman, H. D. (2024, January). Faculty. *Surgical Technique Video: Full Wedge Anatomic Arthroplasty with Navigation*. Course. Advanced Shoulder Arthroplasty, Salt Lake City, UT.
- ◆ Routman, H. D. (2023, November). Faculty. *Managing Humeral Bone Loss – Bone vs Metal*. Course. Orange County Shoulder Course, Orange County, CA.
- ◆ Routman, H. D. (2023, October). Faculty. *What I've Learned, what is New After 20 Years of Shoulder Arthroplasty*. Association Society of Shoulder and Elbow Therapists, Scottsdale, AZ.
- ◆ Routman, H. D. (2023, September). Moderator/ Faculty. *Arthroplasty Cases*. Pinnacle Shoulder Course, Bend, OR.
- ◆ Routman, H. D. (2023, September). Faculty. *How Predictive Modeling Helps Me*. Pinnacle Shoulder Course, Bend, OR.
- ◆ Routman, H. D. (2023, September). Faculty. *Management of Acromial Stress Fractures*. Pinnacle Shoulder Course, Bend, OR.
- ◆ Routman, H. D. (2023, September). Faculty. *My Technique – Intraoperative Navigation*. Pinnacle Shoulder Course, Bend, OR.
- ◆ Routman, H. D. Faculty/ Presenter. *Urban Legends vs Evidence Based Medicine in Total Shoulder Arthroplasty*. Instructional Course. American Academy of Orthopedic Surgeons Annual Meeting; (2023, September), Las Vegas, NV; (2022, March), Chicago, IL; (2021, September), San Diego, CA.
- ◆ Routman, H. D. (2023, June). Faculty. *Revision Shoulder Arthroplasty: Controversies and Challenges – Acromial Stress Fractures*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. (2023, June). Faculty. *Reverse Shoulder Arthroplasty Design – Why I Like to Split the Difference*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. Faculty/ Scientific Committee. *Subscapularis Tenotomy and Repair Video*. San Diego Shoulder Course, (2023, June), San Diego, CA; Advanced Shoulder Arthroplasty Meeting, (2019), Park City, UT.
- ◆ Routman, H. D. (2023, May). Faculty. *Capsulorrhaphy Arthroplasty*. New York Shoulder Arthroplasty Course. New York, NY.

- ◆ Routman, H. D. (2023, May). Faculty. *Predictive Analytics and Machine Learning. What Does it Do for Me?* Shoulder360 – The Comprehensive Shoulder Course, Miami, FL.
- ◆ Routman, H. D. (2023, February). Faculty. *Disasterplasty*. Rome Revision Shoulder Arthroplasty Course, Rome, Italy.
- ◆ Routman, H. D. (2023, February). Faculty. *Revision of Failed Stem with Inadequate Bone Stock*. Rome Revision Shoulder Arthroplasty Course, Rome, Italy.
- ◆ Routman, H. D. (2023, February). Faculty. *Revision with Navigation*. Rome Revision Shoulder Arthroplasty Course, Rome, Italy.
- ◆ Routman, H. D. (2023, February). Faculty. *Why Do I Prefer Metal?* Rome Revision Shoulder Arthroplasty Course, Rome, Italy.
- ◆ Routman, H. D. Faculty/ Presenter. *Humeral Bone Loss in Shoulder Arthroplasty*. American Osteopathic Academy of Orthopedics Annual Meeting, (2022, November), Chicago, IL; SPOT Sociedad Puertorriqueña de Ortopedia y Traumatología Annual Congress, (2022, September), Rio Mar, PR.
- ◆ Routman, H. D. (2022, September). Faculty. *Machine Learning in Shoulder Arthroplasty*. Sociedad Puertorriqueña de Ortopedia y Traumatología Annual Congress, Rio Mar, PR.
- ◆ Routman, H. D. (2022, September). Faculty. *64-year-old with a 4-part Proximal Humerus Fracture – I do a rTSA*. Sociedad Puertorriqueña de Ortopedia y Traumatología Annual Congress, Rio Mar, PR.
- ◆ Routman, H. D. (2022, June). Faculty. *Difficult Rotator Cuff Cases Panelist*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. (2022, June). Faculty. *Partial to Massive Tears- A Case-Based Journey*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. (2022, June). Faculty. *Re-Live Augmented Anatomic TSA for B2 Glenoid Deformity*. San Diego Shoulder Course. San Diego, CA.
- ◆ Routman, H. D. (2022, April). Faculty/ Planning Committee. *Deltoid Wrap...KEY – Debate vs Pascal Boileau, MD*. Shoulder360 – The Comprehensive Shoulder Course, Miami, FL.
- ◆ Routman, H. D. (2022, April). Faculty/ Planning Committee. *Does Humeral Version Matter in Reverse... If so, What Should it Be?* Shoulder360 – The Comprehensive Shoulder Course, Miami, FL.
- ◆ Routman, H. D. (2022, April). Faculty/ Planning Committee. *Judge for Pearls and Proximal Humerus Fracture Sections*. Shoulder360 – The Comprehensive Shoulder Course, Miami, FL.
- ◆ Routman, H. D. (2022, April). Faculty/ Planning Committee. *Machine Learning Predictors of Responsiveness to Shoulder Arthroplasty*. Shoulder360 – The Comprehensive Shoulder Course, Miami, FL.
- ◆ Routman, H. D. (2022, March) Faculty/ Presenter. *Research in Private Practice*. Instructional Course. American Academy of Orthopedic Surgeons Annual Meeting, Chicago, IL.
- ◆ Routman, H. D. (2022, January). Faculty. *Humeral Window and Repair - Video*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2022, January). Faculty. *Predictors of Good and Bad Outcomes in Shoulder Arthroplasty: What is Modifiable?* Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2022, January). Faculty. *Primary Glenohumeral Osteoarthritis – When to Consider RSA*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2022, January). Faculty. *Relive Surgery RSA with Intra-op Navigation*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2022, January). Faculty. *Revision of the Failed Humeral Stem without Sufficient Bone Stock*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2022, January). Faculty. *What are Smart Instruments and How Can They Help Me?* Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. Faculty/ Presenter. (2022, 2021, 2019). *Shoulder Arthroplasty Panel Moderator*. Combined OLC Resident Course. American Academy of Orthopedic Surgeon & American Shoulder and Elbow Surgeons; Rosemont, IL.
- ◆ Routman, H. D. (2021, October) Faculty/ Presenter. *Total Shoulder and Reverse Total Shoulder Arthroplasty – State of the Art*. Orthopaedic Learning Center (OLC) Instructional Course #3344. American Academy of Orthopaedic Surgeons & American Shoulder and Elbow Surgeons, Rosemont, IL.
- ◆ Routman, H. D. (2021, April). Faculty. *2cm Cuff Tear in an Active 50, 70, or 80 yr old – What Do you Do?* 27th Annual Tampa Shoulder Course, Tampa, FL.

- ◆ Routman, H. D. (2019). Faculty. *Computer Navigation in Shoulder Arthroplasty*. Holy Cross Orthopaedic Institute/ Massachusetts General Hospital: 3rd Annual Winter Hip, Knee and Shoulder Symposium, Fort Lauderdale, FL.
- ◆ Routman, H. D. (2019). Faculty. *Convertibility in Shoulder Arthroplasty – An Opportunity or an Obligation*. Holy Cross Orthopaedic Institute/ Massachusetts General Hospital: 3rd Annual Winter Hip, Knee and Shoulder Symposium, Fort Lauderdale, FL.
- ◆ Routman, H. D. (2019). Faculty. *Pain Management Protocols for Shoulder Surgery*. Holy Cross Orthopaedic Institute/ Massachusetts General Hospital: 3rd Annual Winter Hip, Knee and Shoulder Symposium, Fort Lauderdale, FL.
- ◆ Routman, H. D. (2019). Faculty/ Scientific Committee. *Humeral Reconstruction Prosthesis for Proximal Humeral Bone Loss*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2019). Faculty/ Scientific Committee. *Rehabilitation After Reverse Shoulder Arthroplasty*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2019). Faculty/ Scientific Committee. *Removal of a Well-Fixed Cemented Stem*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2019) Faculty/ Presenter. *Spotlight Session on GPS Targeting Shoulder Arthroplasty, Resident Competition Moderator – Shoulder Arthroplasty Cases*. Combined OLC Resident Course. American Academy of Orthopedic Surgeon / American Shoulder and Elbow Surgeons. Spotlight Session on GPS Targeting for Shoulder Arthroplasty. Rosemont, IL 2019.
- ◆ Routman, H. D. Faculty/ Presenter. *The Failed Reverse Shoulder Arthroplasty: Step-by-Step Approach to Revision. How the Experts Think: A Case-Based ICL*. Instructional Course. American Academy of Orthopaedic Surgeons Annual Meeting; (2019) Las Vegas, NV, (2018) New Orleans, LA.
- ◆ Routman, H. D. (2019). Faculty/ Scientific Committee. *The Use of Augments for E2/E3 Deformity in Reverse Shoulder Arthroplasty*. Advanced Shoulder Arthroplasty Meeting, Park City, UT.
- ◆ Routman, H. D. (2018). Faculty. *Humeral Lateralization*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2018). Faculty. *Preoperative Planning for a TSA and rTSA*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2018). Faculty. *The Disappearing Stem: Long, Short, Stemless*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2018). Faculty/ Moderator. *Total Shoulder Arthroplasty*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2018). Faculty. *Live Reverse Shoulder Replacement Demonstration with Navigation via Internet from JFK Medical Center*. Foundation for Orthopedic Research and Education: Current Solutions in Shoulder and Elbow Surgery, Tampa, FL.
- ◆ Routman, H. D. (2017). Faculty. *How I Do It – Determining Correct Glenoid Orientation*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2017). Faculty/ Presenter. *How Reverse Shoulder Arthroplasty Works*. Orthopaedic Learning Center (OLC) Resident Course Presentation. American Shoulder and Elbow Surgeons, Chicago, IL.
- ◆ Routman, H. D. (2017). Faculty/ Presenter. *How to Do an RSA? Peals and Pitfalls. Total Shoulder and Latarjet / Open Instability Procedures*. Orthopaedic Learning Center (OLC) Instructional Course #3082. American Academy of Orthopaedic Surgeons / American Shoulder and Elbow Surgeons, Chicago, IL.
- ◆ Routman, H. D. (2017). Faculty. *Humeral Sided Lateralization*. Holy Cross Hospital Orthopedic Institute/ Massachusetts General Hospital: 2nd Annual Winter Hip, Knee and Shoulder Symposium, Ft. Lauderdale, FL.
- ◆ Routman, H. D. (2017). Faculty. *Live Reverse Shoulder Replacement Demonstration*. Foundation for Orthopedic Research and Education: Current Solutions in Shoulder and Elbow Surgery, Tampa, FL.
- ◆ Routman, H. D. (2017). Faculty. *Optimizing Glenoid Insertion*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2017). Faculty. *Pain Management Following Shoulder Arthroplasty*. Holy Cross Hospital Orthopedic Institute/ Massachusetts General Hospital: 2nd Annual Winter Hip, Knee and Shoulder Symposium, Ft. Lauderdale, FL.
- ◆ Routman, H. D. (2017). Faculty. *Reverse Shoulder Arthroplasty – Indications and Outcomes*. Foundation for Orthopedic Research and Education: Current Solutions in Shoulder and Elbow Surgery, Tampa, FL.

- ◆ Routman, H. D. (2017, 2016, 2015, 2014). Faculty. *Reverse TSA – Managing Glenoid Bone Loss*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2016, 2015). Faculty. *Point/ Counterpoint Debate: Pegs vs Keels in TSA*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D., (2016). Faculty/ Presenter. *Reverse Total Shoulder and Latarjet Procedures Presentation – Glenoid Bone Loss in Reverse Shoulder Arthroplasty*. Orthopaedic Learning Center (OLC) Instructional Course #3673. American Academy of Orthopaedic Surgeons, Chicago, IL.
- ◆ Routman, H. D. (2016, 2015, 2014). Faculty. *Seeing the Glenoid – Getting that Surgical Exposure*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2016). Faculty. *Short Stems and No Stems – When and Why*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2016). Chairman/ Course Director. Association of Clinical Elbow and Shoulder Surgeons 12th Annual Meeting. Tabernash, CO.
- ◆ Routman, H. D. (2015, August). Faculty. *Anterior Capsulo-Labral Reconstruction – Technique and Surgical Video*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Upper Extremity Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2015, August). Faculty. *Slap Repair – Does Age Matter?* Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Upper Extremity Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2015, August). Faculty. *Short Stem and Stemless Arthroplasty: Is It the Future?* Shoulder Arthroplasty Masters Course. San Francisco, CA.
- ◆ Routman, H. D. Faculty/ Presenter. *Reverse Shoulder Arthroplasty Biomechanics: The Clinical Impact of Design Decisions*. Shoulder Arthroplasty Masters Course, (2015, August), San Francisco, CA; (2014, April), Rio Di Janeiro, Brazil.
- ◆ Routman, H. D. (2015). Faculty. *Open and Arthroscopic Techniques in Shoulder Surgery Chicago*. Orthopaedic Learning Center (OLC) Instructional Course. American Academy of Orthopaedic Surgeons & American Shoulder and Elbow Society. Course #3344, (2015); (2008, January); Course #3414, (2002, June), Chicago, IL.
- ◆ Routman, H. D. Faculty/ Presenter. *Proximal Humerus Fractures – Repair, Replace or Reverse*. Medical Education Course. American Osteopathic Academy of Orthopedics Mid- Year Meeting, (2015), Amelia Island, FL; New England Orthopaedic Society Annual Meeting, (2014), Jay, VT; Exactech Equinox Platform: (2014, February), Houston, TX, (2013, October), Las Vegas, NV, (2013, June), Portland, ME, (2013, May), Miami, FL, (2013, March), Tulsa, OK, (2012, December), San Francisco, CA, (2012, November), Henderson, NV, (2012, June), Chicago, IL, (2012, February), Miami, FL, (2012, January), Salt Lake City, UT; Kansas City Orthopedic Residency Program, Kansas City, MO; Master Course in Shoulder Arthroplasty, (2012, June), Bordeaux, France; Advanced Shoulder Course, (2012, April), Naples, Italy; Grand Rounds Invited Speaker, (2012, February) Kansas City, MO.
- ◆ Routman, H. D. (2015). Course Director/ Faculty. *Proximal Humerus Fractures: What You Need to Know*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2015). Course Director/ Faculty. *Rotator Cuff Repair: Surgical Technique and Rehabilitation Implications*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2015). Course Director/ Faculty. *Shoulder Arthroplasty: Where We Are in 2015?* Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2015). Faculty. *Reverse Shoulder Arthroplasty for Fracture*. Advanced Concepts in Sports Medicine and Orthopaedic Surgery, Las Vegas, NV.
- ◆ Routman, H. D. (2015). Faculty. *What Would You Do? Case-Based Presentations and Panel Points of Discussion for TSA*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2014). Faculty. *Managing Posterior Bone Loss and Wear in Anatomic TSA*. Shoulder Course. International Congress for Joint Reconstruction, Las Vegas, NV.
- ◆ Routman, H. D. (2014). Faculty. *Reverse Shoulder Replacement for Proximal Humerus Fracture*. Advanced Concepts in Sports Medicine and Orthopaedic Surgery, Las Vegas, NV.

- ◆ Routman, H. D. (2014, January). Faculty. *Live Cadaveric Surgical Demonstration of Anatomic Shoulder Arthroplasty*. Current Concepts in Shoulder and Elbow Surgery, Tampa, FL.
- ◆ Routman, H. D. (2013, August). Course Director/ Faculty. *Arthroscopic Rotator Cuff Repair – Current Concepts and Video Vignettes*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2013, August). Course Director/ Faculty. *Shoulder Arthroplasty: Current Concepts and Video Vignettes*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2012, August). Faculty. *Reverse Total Shoulder Arthroplasty for Rotator Cuff Tear Arthropathy – Lecture and live video*. Human Performance and Rehabilitation Centers / St. Francis Shoulder Surgery Service / McCluskey Education and Research Foundation. Shoulder Rehabilitation State of the Art. Columbus, GA.
- ◆ Routman, H. D. (2012, August). Faculty. *What's New in Arthroscopic Rotator Cuff Repair*. Human Performance and Rehabilitation Centers / St. Francis Shoulder Surgery Service / McCluskey Education and Research Foundation. Shoulder Rehabilitation State of the Art. Columbus, GA.
- ◆ Routman, H. D. (2011, August). Course Director/ Faculty. *Arthritic Conditions of the Shoulder*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2011, August). Course Director/ Faculty. *Instability Current Concepts and Treatment*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2011, August). Course Director/ Faculty. *Non-Surgical Management of Rotator Cuff Tear: Who and How*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2011, August). Course Director/ Faculty. *Rotator Cuff Repair – Most Recent Concepts*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2011, August). Course Director/ Faculty. *Shoulder Anatomy: Video Presentation of Shoulder Dissection and Total Shoulder Replacement*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2011, August). Course Director/ Faculty. *Shoulder Replacement – Fracture, Total, Reverse: Are They Different?* Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation - State of the Art, Palm Beach, FL.
- ◆ Routman, H. D. (2010, July). Faculty. *Managing Complex Problems in Shoulder Instability: Managing Humeral Head Bone Loss, Remplissage, and Allograft Techniques*. Surgical Skills Training Course. Arthrex, Naples, FL.
- ◆ Routman, H. D. (2010, July). Faculty. *Managing Complex Problems in Shoulder Instability: Live Surgical Demonstration on Cadaver – Posterior and Pancapsulolabry*. Surgical Skills Training Course. Arthrex, Naples, FL.
- ◆ Routman, H. D. (2010, July). Faculty. *Managing Complex Problems in Shoulder Instability: Open Inferior Capsular Shift*. Surgical Skills Training Course. Arthrex, Naples, FL.
- ◆ Routman, H. D. (2010, July). Faculty. *Managing Complex Problems in Shoulder Instability: Posterior Instability*. Surgical Skills Training Course. Arthrex, Naples, FL.
- ◆ Routman, H. D. (2009, October). Moderator and Course Coordinator. *Shoulder and Elbow Session*. American Osteopathic Academy of Orthopedics Annual Meeting, Boston, MA.
- ◆ Routman, H. D. (2009, August). Faculty. *Arthroscopic Instability Repair – Video Demonstration*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Shoulder Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2009, August). Faculty. *Partial Rotator Cuff Repair*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Shoulder Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2009, August). Faculty. *Reverse Total Shoulder Arthroplasty*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Shoulder Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2009, August). Faculty. *Total Shoulder Arthroplasty*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Shoulder Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2009, June). Course Director/ Faculty. *Arthroscopic Capsulolabral and SLAP Repair Techniques*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation – State of the Art, West Palm Beach, FL.

- ◆ Routman, H. D. (2009, June). Course Director/ Faculty. *Reverse Shoulder Arthroplasty for Rotator Cuff Tear Arthropathy*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation – State of the Art, West Palm Beach, FL.
- ◆ Routman, H. D. (2009, June). Course Director/ Faculty. *Rotator Cuff Tears Classification, Pathophysiology and Why Some Can Avoid Surgery*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation – State of the Art, West Palm Beach, FL.
- ◆ Routman, H. D. Course Director/ Faculty. *Why Rotator Cuff Repairs Fail*. Palm Beach Shoulder and Sports Medicine Foundation: Palm Beach Shoulder Rehabilitation – State of the Art, (2009, June), West Palm Beach, FL; Palm Beach Shoulder and Sports Medicine Foundation: Continuing Education Series, Shoulder Rehabilitation – State of the Art, (2007, August), Palm Beach Gardens, FL.
- ◆ Routman, H. D. (2008, November). Faculty. *Shoulder Arthroplasty from Fracture to Reverse*. Lecture with Live Translation. Advances in Orthopaedics International Conference, Miami, FL.
- ◆ Routman, H. D. (2008, May). Faculty. *Anatomy, Pathophysiology, and Clinical Examination of Glenohumeral Instability and SLAP Lesions*. Long Island Shoulder Rehabilitation – State of the Art, C. W. Post Campus of Long Island University, Greenvale, NY.
- ◆ Routman, H. D. (2008, May). Faculty. *The Reverse Prosthesis and Surgical Options for Massive Irreparable Rotator Cuff Tears*. Long Island Shoulder Rehabilitation – State of the Art, C. W. Post Campus of Long Island University, Greenvale, NY.
- ◆ Routman, H. D. Faculty/ Presenter/ Lab Instructor. *Open and Arthroscopic Techniques in Shoulder Surgery: Making the Transition from Open to Arthroscopic Rotator Cuff Repair*. Lecture. American Academy of Orthopedic Surgeons/American Shoulder and Elbow Surgeons, (2008, January) Rosemont, IL; American Academy of Orthopedic Surgeons/American Shoulder and Elbow Surgeons, Learning Center Course, *Arthroscopic Rotator Cuff Repair, Small to Massive Acromio-Clavicular Instability, Shoulder Instability and Open Shoulder Instability*. Lab. (2007, April), Chicago, IL.
- ◆ Routman, H. D. (2007, August). Course Director/ Faculty. *Rationale for Non-Surgical Management of Rotator Cuff Tear*. Palm Beach Shoulder and Sports Medicine Foundation: Continuing Education Series, Shoulder Rehabilitation – State of the Art, Palm Beach Gardens, FL.
- ◆ Routman, H. D. (2007, August). Course Director/ Faculty. *Reverse Ball and Socket Shoulder Repair*. Palm Beach Shoulder and Sports Medicine Foundation: Continuing Education Series, Shoulder Rehabilitation – State of the Art, Palm Beach Gardens, FL.
- ◆ Routman, H. D. (2006, August). Faculty. *Reverse Ball and Socket for Rotator Cuff Tear Arthropathy*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Shoulder Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2006, August). Faculty. *Total Shoulder Arthroplasty for Osteoarthritis*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Shoulder Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. (2006, August). Faculty. *Total Shoulder Arthroplasty for Rheumatoid Arthritis*. Human Performance and Rehabilitation Centers/ St. Francis Shoulder Surgery Service/ McCluskey Education and Research Foundation: Shoulder Rehabilitation State of the Art, Columbus, GA.
- ◆ Routman, H. D. Faculty/ Presenter. *Posterior and Multidirectional Instability - Treatment Concepts*. Annual Clinical Assembly of the American College of Osteopathic Surgeons, American Osteopathic Academy of Orthopedics Annual Meeting, (2005, October), Orlando, FL; Chairman and Course Coordinator. American Osteopathic Academy of Orthopedics 42nd Annual Postgraduate Seminar, (2002, April), Chicago, IL.
- ◆ Routman, H. D. (2004, August). Lecturer. *COX-2 NSAIDs*. Pfizer CME Lecture, West Palm Beach, FL.
- ◆ Routman, H. D. (2002, June). Course Faculty/ Lab Instructor. *Advanced Open and Arthroscopic Shoulder Surgery Course #3414: Proximal Humerus Fractures – Classification and Decision Making* & *Surgeons Course #3417: Proximal Humerus Fractures – Classification and Percutaneous Pin Fixation*. Orthopaedic Learning Center (OLC) Instructional Course. American Academy of Orthopaedic Surgeons, Chicago, IL.
- ◆ Routman, H. D. (2002, April). Chairman/ Course Coordinator/ Faculty. *Repairs of the Rotator Cuff During Total Shoulder Arthroplasty*. American Osteopathic Academy of Orthopaedics 42nd Annual Postgraduate Seminar, Chicago, IL.
- ◆ Routman, H. D. (2002, April). Chairman/ Course Coordinator/ Faculty. *Shoulder and a Little Elbow*. American Osteopathic Academy of Orthopaedics 42nd Annual Postgraduate Seminar, Chicago, IL.

GRAND ROUNDS PRESENTATIONS

- ◆ Routman, H. D. (2022, April). Presenter. *Machine Learning – What you Need to Know*. Grand Rounds Presentation. Mississippi Sports Medicine Center Fellowship Program, Jackson, MS.
- ◆ Routman, H. D. (2022, April). Presenter. *Humeral Bone Loss in Revision Shoulder Arthroplasty – Lecture and Cadaver Lab Experience*. Grand Rounds Presentation. Mississippi Sports Medicine Center Fellowship Program, Jackson, MS.
- ◆ Routman, H. D. (2022, April). Presenter. *Humeral Bone Loss in Revision Shoulder Arthroplasty – Lecture and Cadaver Lab Experience*. Grand Rounds Presentation. Mississippi Sports Medicine Center Fellowship Program, Jackson, MS.
- ◆ Routman, H. D. (2021, November). Presenter. *Machine Learning and AI in Shoulder Arthroplasty*. Grand Rounds Presentation. Massachusetts General Hospital/ Harvard Orthopedic Residency Program, Boston, MA.
- ◆ Routman, H. D. (2021, April). Presenter. *From Mechanics to Machine Learning in Shoulder Arthroplasty*. Grand Rounds Presentation. Mount Sinai Orthopaedic Residency Program, New York, NY.
- ◆ Routman, H. D. (2015). Presenter. *Biomechanics of Reverse Shoulder Arthroplasty and Design Considerations for Shoulder Replacement*. Grand Rounds Presentation. Modesto Orthopaedic Residency Program, Modesto, CA.
- ◆ Routman, H. D. (2015). Presenter. *Reverse Shoulder Replacement for Proximal Humerus Fracture*. Grand Rounds Presentation. Modesto Orthopaedic Residency Program, Modesto, CA; Vanderbilt University, Nashville, TN.
- ◆ Routman, H. D. (2015). Presenter. *Design of Shoulder Arthroplasty Devices and the Biomechanical Consequences of Implant Decisions*. Grand Rounds Presentation. Yonsei University, Wanju-gun, South Korea.
- ◆ Routman, H. D. (2014, May). Presenter. *Biomechanical Evolution of Reverse Shoulder Replacement*. Grand Rounds Presentation. University of Puerto Rico, San Juan, San Juan, PR.
- ◆ Routman, H. D. (2014, May). Presenter. *Keys to Managing Proximal Humerus Fractures*. Grand Rounds Presentation. University of Puerto Rico, San Juan, San Juan, PR.
- ◆ Routman, H. D. (2012, February). Invited Speaker. *Keys to Reliable Glenohumeral Joint Surgical Exposure*. Grand Rounds Presentation. Kansas City Orthopedic Residency Program, Kansas City, MO.
- ◆ Routman, H. D. (2011, May). Invited Speaker. *Evolution of Shoulder Arthroplasty: Glenoid Exposure Tips*. Grand Rounds Presentation. Riverside Memorial Orthopaedic Residency Program, Riverside, CA.
- ◆ Routman, H. D. (2009, October). Presenter. *Live Cadaver Dissection to Demonstrate Shoulder Deltopectoral Surgical Exposure*. Grand Rounds Presentation. Philadelphia College of Osteopathic Medicine Orthopedic Residency Program, Philadelphia, PA.
- ◆ Routman, H. D. (2009, October). Presenter. *Reverse Shoulder Arthroplasty – Design, Indications, and Preliminary Results*. Grand Rounds Presentation. Philadelphia College of Osteopathic Medicine Orthopedic Residency Program, Philadelphia, PA.
- ◆ Routman, H. D. (2007, January). Lecturer/ Lab Instructor. *Advances in Implant Design for Shoulder Replacement*. Lecture. *Surgical Technique for Total Shoulder Replacement and Humeral Head Replacement for Fractures*. Lab. Grand Rounds Presentation. Philadelphia College of Osteopathic Medicine Orthopedic Department Lecture, Philadelphia, PA.
- ◆ Routman, H. D., & Frankle, M. (2006, October). Lecturer/ Lab Instructor. *Reverse Ball and Socket Update*. Lecture. *Live Cadaver Demonstration of Reverse Ball and Socket Arthroplasty*. Lab. Grand Rounds Presentation. Orlando Regional Medical Center Department of Orthopaedics Residency Program, Orlando, FL.
- ◆ Routman, H. D. (2005, February). Guest Speaker. *Understanding Shoulder Instability*. Grand Rounds Presentation. Nova Southeastern University Department of Surgery: Student Osteopathic Orthopedic Association, Davie, FL.
- ◆ Routman, H. D. (2004, August). Presenter. *Arthroscopic Knotless Rotator Cuff Repair*. Grand Rounds Presentation. Philadelphia College of Osteopathic Medicine: Orthopaedic Residency Training Program, Philadelphia, PA.
- ◆ Routman, H. D. (2004, August). Presenter. *My Initial Experience with Reverse Ball and Socket Arthroplasty*. Grand Rounds Presentation. Philadelphia College of Osteopathic Medicine: Orthopaedic Residency Training Program, Philadelphia, PA.
- ◆ Routman, H. D. (2004, February). Presenter. *Cuff Deficient Arthritis*. Grand Rounds Presentation. University of Florida Department of Orthopaedics, Jacksonville, FL.
- ◆ Routman, H. D. (2002, January). Presenter. *Hemi vs. Total Shoulder Arthroplasty*. Grand Rounds Presentation. Orlando Regional Medical Center Orthopaedic Surgery, Orlando, FL.
- ◆ Routman, H. D. (2004, February). Presenter. *Internal Impingement and SLAP Tears – Concepts and Controversy*. Grand Rounds Presentation. University of Florida Orthopaedic Surgery, Jacksonville, FL.

- ◆ Routman, H. D. (1998). Presenter. *Acetabular Fractures*. Grand Rounds Presentation. Temple University Department of Orthopaedic Surgery, Philadelphia, PA.
- ◆ Routman, H. D. (1998). Lecturer. *Introduction to Fractures*. Surgical Grand Rounds Presentation to the 2nd Year Medical Student Class. Philadelphia College of Osteopathic Medicine: Germantown Hospital and Medical Center, Philadelphia, PA.

PROFESSIONAL MEDICAL COVERAGE

- ◆ Santaluces High School Sports Team, (2005-2008), Lake Worth, FL.
- ◆ PGA of America: Honda Classic Tournament, (2003-2004, March), Palm Beach Gardens, FL.
- ◆ Lake Worth High School Football Team, (2002-2003), Lake Worth, FL.
- ◆ PGA of America: Buick Challenge at Callaway Gardens, (2001), Palm Beach Gardens, FL.
- ◆ Columbus High School District Regional Wrestling Invitational at Hardaway High School, (2000), Columbus, GA.
- ◆ Arena Football 2 Professional Football Team, *Columbus Wardogs*, (2001-2002), Columbus, GA.
- ◆ Semiprofessional Football, *Columbus Express*, (2001-2002), Columbus, GA.
- ◆ United States Cowboy Tour Rodeo Championships, (2000), Columbus, GA.
- ◆ Steeple Chase at Callaway Gardens, *#1 Steeple Chase in USA*, (2000), Pine Mountain, GA.
- ◆ WTA Avanta Tennis Championships, (1999-2000), Philadelphia, PA.
- ◆ Kendrick High School Football, (2000), Columbus, GA.
- ◆ CHL Professional Hockey Team, *Columbus Cottonmouths*, (2000-2001), Columbus, GA.
- ◆ I-A level Baseball Associated with Cleveland Indians, *Columbus Redstixx*, (2000-2001), Columbus, GA.
- ◆ Philadelphia 76'ers Assistant Team Physician to Dr. J. McPhilemy, (1999-2000), Philadelphia, PA.

SPECIAL CONTINUING PROFESSIONAL EDUCATION

- ◆ American Shoulder and Elbow Surgeons, Closed Meeting. (2023, October), Scottsdale, AZ; (2022, October), Atlanta, GA; (2020, October), Virtual; (2019, October), New York, NY; (2018, October), Chicago, IL; (2017, October), New Orleans, LA; (2016, October), Boston, MA; (2015, October), Asheville, NC; (2014, October), Pinehurst, NC
- ◆ Association of Clinical Elbow and Shoulder Surgeons, Annual Meeting. (2023, July), Snowmass, CO; (2022, November), Key Largo, FL; (2019, November), Boca Raton, FL; (2018, July), Lake George, NY; (2017, November), Scottsdale, AZ; (2016, August) Tabernash, CO; (2015, November), Miami, FL; (2014, August), Maui, HI; (2013, November), Scottsdale, AZ; (2012, August), Whitefish, MT; (2011, November), Palm Beach, FL; (2010, September), San Diego, CA.
- ◆ American Shoulder and Elbow Society, Specialty Day; American Academy of Orthopaedic Surgeons, Annual Meeting; (2023, March), Las Vegas, NV; (2022, March), Chicago, IL; (2021, March), Virtual; (2019, March), Las Vegas, NV; (2015, March), Las Vegas, NV; (2014, March), New Orleans, LA; (2013, March), Chicago, IL; (2011, February), San Diego, CA; (2010, March), New Orleans, LA; (2009, March), Las Vegas, NV; (2008, March), San Francisco, CA; (2006, March), Chicago, IL; (2002, March), Dallas, TX.
- ◆ Société Européenne pour la Chirurgie de l'Epaule et du Coude (European Society for Surgery of the Shoulder and Elbow), Annual Meeting. (2018, September), Geneva, Switzerland; (2015, September), Milan, Italy; (2012, September), Dubrovnik, Croatia; (2011, September), Lyon, France.
- ◆ American Shoulder and Elbow Surgeons, Open Symposium. (2016, October), Boston, MA.
- ◆ International Congress of Shoulder and Elbow Surgeons. 13th Annual Meeting, (2016, May), Jeju, Republic of Korea; 12th Annual Meeting, (2013, April), Nagoya, Japan; 11th Annual Meeting, (2010, September), Edinburgh, Scotland.
- ◆ Lafosse International Shoulder Symposium. (2007, June), Annecy, France.
- ◆ 3rd International Conference on Shoulder Arthroplasty. (2005, April), Paris, France.
- ◆ 9th International Congress on Surgery of the Shoulder. (2004), Washington, DC.
- ◆ 4th Biennial American Academy of Orthopaedic Surgeons/American Shoulder and Elbow Surgeons Shoulder and Elbow Meeting, (2003, October), Monterey, CA.
