

BRIAN ROBERT ONSTOT, BSE
Curriculum Vitae

EDUCATION:

B.S.E. **Arizona State University**, Tempe, AZ, December, 2008 (Bioengineering)

Additional **Faro®**
Coursework Laser Scanner Training with Scene, 5 Day Course (February, 2019)

Crash Safety Solutions
Human Factors for Traffic Crash Reconstruction (January, 2019)

Northwestern University Traffic Institute, Evanston, IL
Traffic Accident Reconstruction I & II (November, 2017)

Collision Safety Institute
Crash Data Retrieval (CDR) Data Analyst (May, 2017)
Crash Data Retrieval (CDR) Technician Levels 1 and 2 (April, 2017)

Midwestern University
Arizona College of Osteopathic Medicine (2011-2014)

ACCREDITATIONS, LICENSES AND ENDORSEMENTS:

ACTAR, Accreditation Commission for Traffic Accident Reconstruction (September 25, 2018, Accreditation #3457)
Private Investigator, State of Arizona, License #1680440

POSITIONS HELD:

2019 - present **Biomechanics Research & Consulting, Inc.**, Tempe, AZ
Accident Reconstruction Expert

2016 - 2019 **Biomechanics Research & Consulting, Inc.**, Tempe, AZ
Case Analyst

2011 - 2014 **The Center for Orthopedic Research and Education (CORE)**, Phoenix, AZ
Engineering Intern

2009 – 2011 **Banner Sun Health Research Institute**
The Center for Orthopedic Research and Education (CORE), Sun City West, AZ
Biomechanical Research Engineer

2008 – 2009 **Sun Health Research Institute**
The Center for Orthopedic Research and Education (CORE), Sun City West, AZ
Research Associate

2006 – 2008 **Sun Health Research Institute**
The Center for Orthopedic Research and Education (CORE), Sun City West, AZ
Engineering Research Intern

2005 and 2006 **Qualcomm Inc.**, San Diego, CA
Engineering Intern

PUBLICATIONS:

Archival Refereed Journal Papers:

Onstot, BR; Jacofsky, MC; Hansen, ML: Muscle Force and Excursion Requirements and Moment Arm Analysis of a Posterior-Superior Offset Reverse Total Shoulder Prosthesis. *Bulletin of the Hospital for Joint Diseases*, 2013

Jarvis, SL; Johnson-Wo, AK; **Onstot, BR**; Bhowmik-Stoker, M; Shrader, MW; Jacofsky, MC; Jacofsky, DJ: Differences between Standard and Minimally Invasive Parapatellar Surgical Approaches for Total Knee Arthroplasty in the Tasks of Sitting and Standing. *Journal of Knee Surgery*, 2013

Jarvis, SL; **Onstot, BR**; Bhowmik-Stoker, M; Jacofsky, MC; Jacofsky, DJ: Differences between Midvastus and Subvastus TKA Surgical Approaches in the Tasks of Sitting and Standing. *The Journal of Knee Surgery*, 2013

Refereed National Conference Proceedings:

Onstot, BR; Hartwell, C; Jarvis, SL; Jacofsky, MC; Hansen, ML: Effect of a Posterior-Superior Offset Reverse Total Shoulder Prosthesis on Glenohumeral Function. *Orthopedic Research Society*, 2014. Poster Presentation

Otis, JC; Hansen, ML; Jacofsky, MC; **Onstot, BR**; Suslak, A; Colley, R: Consequences of Concomitant Subscapularis Repair with Reverse Total Shoulder Arthroplasty. *Gait and Clinical Movement Analysis Society*, 2013. Poster Presentation

Otis, JC; Hansen, ML; Jacofsky, MC; **Onstot, BR**; Richardson, N; Neeley, R: Deltoid Force and Excursion Demands of the Reverse Total Shoulder Prosthesis Compared to a Massive Rotator Cuff Tear. *Gait and Clinical Movement Analysis Society*, 2013. Podium Presentation

Onstot, BR; Jaczynski, AM; Dorenkamp, BC; Jacofsky, MC; Otis, JC; Hansen, ML: The Effect of Superior Offset Humeral Components on Shoulder Muscle Moment Arms and Joint Reaction Force for Reverse Total Shoulder Arthroplasty. *Orthopedic Research Society*, 2013. Poster Presentation

Larsen, B; Jacofsky, MC; Jacofsky, DJ; **Onstot, BR**: Single-Radius Total Knee Implant Outperforms Multi-Radius Design in Level Walking Kinematics and Kinetics. *International Society for Technology in Arthroplasty*, 2013. Podium Presentation

Larsen, B; **Onstot, BR**; Jacofsky, MC: How Changes in Software Versions Alter Study Conclusions. *Gait and Clinical Movement Analysis Society*, 2012. Podium Presentation

Onstot, BR; Suslak, AG; Colley, R; Jacofsky, MC; Otis, JC; Hansen, ML: Consequences of Concomitant Subscapularis Repair with Reverse Total Shoulder Arthroplasty. *Orthopedic Research Society*, 2012. Podium Presentation

Onstot, BR; Richardson, N; Neeley, RA; Jacofsky, MC; Otis, JC; Hansen, ML: Deltoid Force and Excursion Demands of the Reverse Total Shoulder Prosthesis Compared to Massive Rotator Cuff Tear. *Orthopedic Research Society*, 2012. Poster Presentation

Onstot, BR; Larsen, B; Jacofsky, MC; Jacofsky, DJ: Surgical Approach Affects Long Term Function Outcomes in Gait after Receiving a Total Knee Arthroplasty. *International Society for Technology in Arthroplasty*, 2011. Podium Presentation

Onstot, BR; Jacofsky, MC; Jacofsky, DJ: Surgical Approach Yields No Long-Term Functional Differences after TKA in Sit-Stand-Sit Tasks. *International Society for Technology in Arthroplasty*, 2011. Poster Presentation

Onstot, BR; Jacofsky, MC; Jacofsky, DJ: Surgical Approach Yields No Long Term Functional Differences after TKA in Sit-Stand-Sit Tasks. *Orthopedic Research Society*, 2011. Poster Presentation

Onstot, BR; Larsen, B; Jacofsky, MC; Jacofsky, DJ: Surgical Approach Affects Long Term Functional Outcomes in Gait after Receiving a Total Knee Arthroplasty. *Orthopedic Research Society*, 2011. Poster Presentation

Onstot, BR; Johnson, AK; Varnell, M; Jacofsky, MC; Jacofsky, DJ: Functional Differences between BMI groups During Stair Ascent One Year After TKA. *Orthopedic Research Society*, 2011. Poster Presentation

Jacofsky, MC; Larsen, B; **Onstot, BR;** Shrader, MW; Jacofsky, DJ: Influence of Surgical Approach on Clinical Outcomes Measures following TKA. *Western Orthopaedic Association*, 2010. Monterey, CA. Podium Presentation

Onstot, BR; Jacofsky, MC; Shrader, MW; Jacofsky, DJ: Surgical Approach Affects Ability to Control Sitting After Total Knee Arthroplasty. *Western Orthopaedic Association*, 2010. Monterey, CA. Poster Presentation

Onstot, BR; Jacofsky, MC; Shrader, MW; Jacofsky, DJ: Surgical Approach Affects Ability to Control Sitting After Total Knee Arthroplasty. *American Academy of Orthopaedic Surgeons*, 2010. New Orleans, LA. Poster Presentation

Onstot, BR; Jacofsky, MC; Jacofsky, DJ: Functional Differences between Surgical Approach Groups in the Sit-Stand-Sit Task through Six Months Following Total Knee Arthroplasty. *Orthopedic Research Society*, 2010. New Orleans, LA. Short Talk and Poster Presentation

Onstot, BR; Jacofsky, MC; Jacofsky, DJ; Campbell, MD: Functional Outcomes of Unicompartmental and Total Knee Arthroplasty in the Sit-Stand-Sit Task at One Year Post-Operatively. *Orthopedic Research Society*, 2010. New Orleans, LA. Poster Presentation

Onstot, BR; Jacofsky, MC; Jacofsky, DJ: Total Knee Arthroplasty Improves Clinical Outcomes in Obese patients Two Years Post-Operatively. *Orthopedic Research Society*, 2010. New Orleans, LA. Poster Presentation

Bhowmik-Stoker, M; **Onstot, BR;** Shrader, MW; Jacofsky MC; Jacofsky, DJ; Buneo, CA: Functional Assessment of the Sit-Stand-Sit Task Following a Total or Resurfacing Hip Arthroplasty through the One Year Follow-up Time Point. *Orthopedic Research Society*, 2010. New Orleans, LA. Poster Presentation

Bhowmik-Stoker, M; **Onstot, BR;** Buneo, C; Shrader, MW; Jacofsky MC: Midterm Functional Assessment of the Sit-Stand-Sit Task Following a Total or Resurfacing Hip Arthroplasty. *Gait and Clinical Movement Analysis Society*, 2010. New Orleans, LA. Poster Presentation

Tornetta III, P; Jacofsky, DJ; Jaczynski, AM; **Onstot, BR;** Jacofsky, MC: Trans-Sacral Screw Fixation of Stable Zone 2 Sacral Fractures. *25th Annual Meeting of the Orthopedic Trauma Association*, 2009. San Diego, CA. Poster Presentation

CONTINUED EDUCATION:

Hyundai, Kia, Tesla EDR Training (January, 2024)
Southwestern Association of Technical Accident Investigators (January, 2024)
Point Clouds in Collision Reconstruction – Lightpoint Data (October, 2023)
Southwestern Association of Technical Accident Investigators (August, 2023)
Recon-3D Certificate (June, 2023)
Human Factors in Accident Reconstruction – NAPARS (April, 2023)
sUAS and Photogrammetry for Crash Reconstruction – NAPARS (March, 2023)
Southwestern Association of Technical Accident Investigators (March, 2023)
I.DRR User Forum (Winter, 2022)
Southwestern Association of Technical Accident Investigators (Winter, 2022)
EDR Summit (March, 2020)
Utilizing Video Evidence in Traffic Investigations – iINPUT ACE (January, 2020)
Southwestern Association of Technical Accident Investigators (Winter, 2020)
Southwestern Association of Technical Accident Investigators (Summer, 2019)

PROFESSIONAL AFFILIATIONS:

National Association of Professional Accident Reconstruction Specialists (NAPARS)
Southwestern Association of Technical Accident Investigators (SATAI)
Society of Automobile Engineers (SAE)