1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Signature Line/Date

Zachary Michael Vaupel, MD FAAOS

Orthopaedic Surgery of the Foot and Ankle (Board Certified by ABOS)

[vaupelza@miorthosurgeons.com](mailto:vaupelza@miorthosurgeons.com)

www.miorthosurgeons.com

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| --- |
| **Medical Office Address** |
| Michigan Orthopaedic Surgeons  30575 Woodward Avenue  Royal Oak, MI 48073  Phone: 248-280-8550  Fax: 248-280-8571 |

# EDUCATION AND TRAINING

1992 – 1996 **High School Diploma**

Fowlerville High School

Fowlerville, MI

1996 – 2000 **Bachelor of Science – General Biology**

University of Michigan

Ann Arbor, MI

2001 – 2005 **Doctor of Medicine**

Michigan State University College of Human Medicine

East Lansing, MI

2005 – 2006 **Orthopaedic Surgery Internship**

Wayne State University/Detroit Medical Center

Department of Orthopaedic Surgery

Detroit, MI

2006 – 2010 **Orthopaedic Surgery Residency**

Department of Orthopaedic Surgery

William Beaumont Hospital

Royal Oak, MI

2010 – 2011 **Orthopaedic Surgery Fellowship – Foot and Ankle**

Florida Orthopaedic Institute

Tampa, FL

# LICENSURES AND CERTIFICATIONS

**Board Certification**

1. USMLE Step 1

*Pass*

221 (90)

1. USMLE Step 2 Clinical Knowledge

Pass

226 (92)

## 2005 USMLE Step 2 Clinical Skills

Pass

## 2009 USMLE Step 3

### Pass

205 (85)

2010 American Board of Orthopaedic Surgery Part I

Pass

217 (top 82nd percentile)

2013 American Board of Orthopaedic Surgery Part II

Pass (Board Certified by American Board of Orthopaedic Surgery)

**Medical Licensure**

Medical Doctor

Michigan Department of Community Health

License # 4301086275

Issued: 12/16/2010

Controlled Substance Registration Certificate

Drug Enforcement Administration

DEA# FV1922283

Issued: 04/14/2010

**PROFESSIONAL AND ACADEMIC POSITIONS**

**Professional**

2011 – Present Orthopaedic Surgeon

Michigan Orthopaedic Surgeons, PLLC

Southfield, MI

2013 – 2017 Orthopaedic Surgeon

Detroit Medical Center

Detroit Receiving Hospital

Detroit, MI

2015 – Present Consultant

DJO Global

Vista, CA

2015 – Present Product Development and Consultant

Newclip Technics

Nantes, France

2016 – Present Executive Committee Manager

Michigan Orthopaedic Surgeons, PLLC

Southfield, MI

2017 – Present Medical Executive Committee

Surgeons Choice Medical Center

Southfield, MI

2018 – Present Chairman – Department of Orthopaedic Surgery

Surgeons Choice Medical Center

Southfield, MI

2019 – Present Chairman – Marketing Committee

Michigan Orthopaedic Surgeons, PLLC

Southfield, MI

**Academic**

2011 – Present Assistant Professor

Oakland University William Beaumont School of Medicine

Rochester, MI

2014 – Present Clerkship Director – Orthopaedic Surgery Rotation

Oakland University William Beaumont School of Medicine

Rochester, MI

# PROFESSIONAL MEMBERSHIPS

2005 – 2010 Detroit Academy of Orthopaedic Surgeons

2005 – Present American Academy of Orthopaedic Surgeons (Fellow Member)

2005 – 2012 American Medical Association

2011 – 2012 Oakland County Medical Society

2011 – Present American Orthopaedic Foot and Ankle Society

1. 2011 – Present Michigan Orthopaedic Society

# HONORS AND AWARDS

## 1st Place Research Project

## *Detroit Academy of Orthopaedic Surgeons Annual Scientific Meeting*

## Radiographic and damage mode analyses of retrieved Agility total ankle arthroplasty systems

## 2010 1st Place Research Project

## *Detroit Academy of Orthopaedic Surgeons Annual Scientific Meeting*

## Wear Simulation of Reverse Total Shoulder Arthroplasty Systems: Effect of Glenosphere Design

2010 3rd Place Research Project

*William Beaumont Hospital Annual Resident/Fellow Research Forum*

Wear Simulation of Reverse Total Shoulder Arthroplasty Systems: Effect of Glenosphere Design

1. 2010 1st Place Research Project
   * 1. *Michigan Orthopaedic Society Annual Scientific Meeting*

Wear Simulation of Reverse Total Shoulder Arthroplasty Systems:

1. Effect of Glenosphere Design

2013 3rd Place Research Project, E-Poster

*American Orthopaedic Foot and Ankle Society Summer Meeting*

Analysis of Retrieved Salto Talaris Total Ankle Replacement

Systems

2013 1st Place Research Project, Basic Science

*OREF/ORS Midwest Resident Research Symposium*

Influence of Bisphosphonate Pretreatments on Osseous Incorporation and Chondrocyte Viability with Fresh Osteochondral Allografts in Cold Storage

2014 Orthopaedic Trauma Association Highlight Paper

*Orthopaedic Trauma Association Annual Meeting*

Operative treatment of displaced intraarticular calcaneal fractures:

long-term (10-20 Years) results in 108 fractures using a prognostic

CT classification

2017 Teacher of the Year

Department of Orthopaedic Surgery

Oakland University William Beaumont School of Medicine

Royal Oak, MI

2020 New Investigator Recognition Award (NIRA) Finalist

*Orthopaedic Research Society Annual Meeting*

Retrieval analysis of total ankle arthroplasty implants and

periporosthetic tissue through a multicenter collection.

**PUBLICATIONS (Book Chapters)**

**Vaupel Z** and Arnoczky S. Platelet rich plasma: basic science principles and clinical applications. The art and science of orthobiologics for the foot and ankle e-book. American College of Foot and Ankle Surgeons. 2017.

**PUBLICATIONS (Peer-reviewed Journals)**

Lavagnino M, Arnoczky S, Tian T, **Vaupel Z**: The effect of amplitude and frequency of cyclic tensile strain on the inhibition of MMP-1 mRNA expression in tendon cells: An *in vitro* study. *Conn Tissue Res* 44(3-4):181-187, 2003. PMID 14504039.

Arnoczky SP, Lavagnino M, Gardner K, Tian T, **Vaupel Z**, Stick JA: *In vitro* effects of oxytetracycline on matrix metalloproteinase-1 mRNA expression and on collagen gel contraction by cultured myofibroblasts obtained from the accessory ligament of foals. *Am J Vet Res* 65(4):491-496, 2004. PMID 15077693.

Bales CP, Placzek JD, Malone KJ, **Vaupel ZM**, Arnoczky SP: Microvascular supply of the lateral epicondyle and common extensor origin. *J Shoulder and Elbow Surg* 16(4):497-501, 2007. PMID 17254813.

**Vaupel Z**, Baker E, Baker K, Kurdziel M, Fortin P. Analysis of retrieved Agility total ankle arthroplasty systems. *Foot Ankle Int* 30(9):815-823, 2009. PMID 19755064.

**Vaupel Z**, Baker K, Kurdziel M, Wiater JM. Wear simulation of reverse total shoulder arthroplasty systems: effect of glenosphere design. *J Shoulder Elbow Surg* 21(10):1422-9, 2012. PMID 22365559.

Sanders R, **Vaupel ZM**, Erdogan M, Downes, K: Operative treatment of displaced intraarticular calcaneal fractures: long-term (10-20 Years) results in 108 fractures using a prognostic CT classification. *J Ortho Trauma* 28(10):551-63, 2014. 25243849.

Okeagu C, Baker E, Barreras N, **Vaupel Z**, Fortin P, Baker K. Review of mechanical, processing, and immunologic factors associated with outcomes of fresh osteochondral allograft transplantation of the talus. *Foot Ankle Int* 38(7):808-819, 2017. PMID 28385038.

Moore D, **Vaupel Z**, Baker E, Baker K, Fortin P. Effect of bisphosphonate pretreatment on fresh osteochondral allografts: analysis of *in vitro* graft structure and *in vivo* osseous incorporation. *Orthopaedics* 41(3):e376-e382, 2018. PMID 25970765.

**Vaupel Z**, Transarticular Screw Technique for Stabilization of Lisfranc Injuries. *Tech Foot Ankle Surg* 18(1):16-22, 2019.

**PRESENTATIONS (International)**

Lavagnino M, Tian T, **Vaupel ZM**, Arnoczky SP: The effect of amplitude and frequency of cyclic tensile stress on the inhibition of MMP-1 expression in rat tail tendon cells. Proceedings International Symposium on Ligaments and Tendons, 3:29, 2003.

**PRESENTATIONS (National)**

Arnoczky SP, Gardner K, Tian T, Lavagnino M, **Vaupel ZM**, Hayes AL: Oxytetracycline inhibits MMP-1 mRNA expression and collagen remodeling by equine tendon myofibroblasts in a dose dependent manner: A mechanistic basis for the pharmacologic treatment of flexural deformities. Trans Orthop Res Soc 28:778, 2003.

Lavagnino M, Tian T, **Vaupel ZM**, Arnoczky SP: The effect of amplitude and frequency of cyclic tensile stress on the inhibition of MMP-1 expression in rat tail tendon cells. Proceedings of the 2003 Summer Bioengineering Conference 1103, 2003

**Vaupel ZM**, Dodds J, Frick M, Kozlow K: Complications following femoral nerve block anesthesia for ACL reconstruction. E-poster #241. 25th Annual Meeting of the Arthroscopy Association of North America, 2006.

**Vaupel Z**, Baker K, Mangla J, Wiater, JM. A Preliminary Report on the Influence of Glenosphere Design Features on the Polyethylene Wear of Reverse Total Shoulder Arthroplasty Systems: An *In Vitro* Wear Simulation. American Shoulder and Elbow Surgeons 26th Annnual Closed Meeting, 2009.

**Vaupel Z**, Baker E, Baker K, Kurdziel M, Fortin P. Radiographic and damage mode analyses of retrieved Agility total ankle arthroplasty systems. Trans Orthop Res Soc 20:110, 2009.

**Vaupel Z**, Baker K, Mangla J, Wiater, JM. A Preliminary Report on the Influence of Glenosphere Design Features on the Polyethylene Wear of Reverse Total Shoulder Arthroplasty Systems: An *In Vitro* Wear Simulation. Podium Presentation. American Shoulder and Elbow Surgeons Specialty Day at the American Academy of Orthopaedic Surgeons Annual Meeting. Paper #17 (WEB470), 2010.

**Vaupel Z**, Baker K, Mangla J, Wiater, JM. Wear Simulation of Reverse Total Shoulder Arthroplasty Systems: Effect of Glenosphere Design. Proceedings of the American Academy of Orthopaedic Surgeons Annual Meeting 595:167, 2010.

**Vaupel Z**, Baker K, Mangla J, Wiater, JM. The Influence of Glenosphere Design Features on the Polyethylene Wear of Reverse Total Shoulder Arthroplasty Systems: An *In Vitro* Wear Simulation. Trans Orthop Res Soc (Abstract ID ORS2010-1575), 2010.

Matuszak S, **Vaupel Z**, Baker E, Maerz T, Baker K, Kurdziel M, Richardson-Frazzitta, Fortin P. Characterization of Patient Specific Contact Pressures Within the Talar Footprint of Retrieved Agility Total Ankle Arthroplasty Tibial Components. E-Poster. American Orthopaedic Foot and Ankle Society Summer Meeting, 2011.

Sanders RW, **Vaupel, Z**, Downes K, Erdogan, M. The Operative Treatment of Displaced Intra-articular Calcaneal Fractures (DIACFs): Long Term (10-20 years) Results in 108 Fractures using a Prognostic CT Classification. Podium Presentation. Orthopaedic Trauma Association Annual Meeting, 2012.

**Vaupel Z**, Erdogan, M, Sanders RW. The Outcome of Displaced Intra-Articular Calcaneal Fractures Treated Operatively Using an Extensile Lateral Approach and a Plate and Screw Construct: Long-Term Results. Podium Presentation. American Orthopaedic Foot and Ankle Society Specialty Day at the American Academy of Orthopaedic Surgeons Annual Meeting, 2012.

**Vaupel Z**, Baker E, Coetzee JC, Stone R, Salisbury M, Baker K, Fortin P. Analysis of Retrieved Salto Talaris Total Ankle Replacement Systems. E-Poster. American Orthopaedic Foot and Ankle Society Summer Meeting, 2013.

Moore D, Baker K, Maerz T, **Vaupel Z**, Fortin P. Influence of Bisphosphonate Pretreatments on Osseous Incorporation and Chondrocyte Viability with Fresh Osteochondral Allografts in Cold Storage. Podium Presentation. OREF/ORS Midwest Resident Research Symposium, 2013.

Moore D, Baker K, Maerz T, **Vaupel Z**, Fortin P. Influence of Bisphosphonate Pretreatments on Osseous Incorporation and Chondrocyte Viability with Fresh Osteochondral Allografts in Cold Storage. Podium Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, 2013.

**Vaupel Z**, Green G, Baker E, Salisbury M, Baker K, Bohay D, Coetzee C, Myerson M, Fortin P. Characterization of *In Vivo* Damage and Failure of Total Ankle Arthroplasty Systems: A Multi-Center Retrieval Study. Podium Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, 2015.

**Vaupel Z**, Green G, Baker E, Salisbury M, Baker K, Bohay D, Coetzee C, Myerson M, Fortin P. Characterization of *In Vivo* Damage and Failure of Total Ankle Arthroplasty Systems: A Multi-Center Retrieval Study. Podium Presentation. American Orthopaedic Foot and Ankle Society Summer Meeting, 2015.

**Vaupel Z**, Baker E, Anderson J, Bohay D, Coetzee JC, Myerson M, Green G, Salisbury M, Baker K, Fortin P. Multi-Modal Analysis of Failed Total Ankle Arthroplasty Implants Retrieved at Multiple Centers. Scientific Exhibit. American Academy of Orthopaedic Surgeons Annual Meeting, 2016.

Hsu M, Loy B, Salisbury M, Baker E, **Vaupel Z**, Fortin P, Baker K. Influence of local chemokine delivery and postoperative peripheral blood mobilization on Achilles tendon repair. Poster Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, 2019.

Baker E, **Vaupel Z**, Gehrke C, Briggs D, Baker K, Coetzee J, Myerson M, Anderson J, Biebelhausen S, Fortin P. Retrieval analysis of total ankle arthroplasty implants and periporosthetic tissue through a multicenter collection. Podium Presentation. Orthopaedic Research Society Annual Meeting, 2020.

**Vaupel Z**, Briggs D, Baker E, Gehrke C, Coetzee J, Myerson M, Anderson J, Biebelhausen S, Fortin P. Retrieval analysis of total ankle arthroplasty implants and periporosthetic tissue through a multicenter collection. Accepted as Podium Presentation (E Presentation). American Academy of Orthopaedic Surgeons Annual Meeting, 2020.

Ciufo D, Koueiter D, Alsaleh M, Arapovic A, Baker K, Baker E, Fortin P, **Vaupel Z**. A biomechanical evaluation of the tibia after retrograde intramedullary reaming. Accepted as Podium Presentation. American Academy of Orthopaedic Surgeons Annual Meeting, 2020.

Baker E, Gehrke C, Ciufo D, **Vaupel Z**, Fortin P. Postoperative length of stay may predict foot and ankle patients at risk for readmission. Accepted as Poster Presentation. American Orthopaedic Foot and Ankle Society Annual Meeting, 2020.

Baker E, Harley J, Gehrke C, Ciufo D, Fortin P, **Vaupel Z**. Applying the periprosthetic joint infection consensus definition to a case series of revision foot and ankle implant-associated and infection-suspected procedures to asses diagnosis. E Poster, American Orthopaedic Foot and Ankle Society Annual Meeting, 2020.

**PRESENTATIONS (Regional)**

Wiater JM, **Vaupel Z**, Baker K, Shorez J. Unique biomechanical wear simulation of reverse total shoulder systems. Poster presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2008.

**Vaupel Z**, Baker E, Baker K, Kurdziel M, Fortin P. Radiographic and damage mode analyses of retrieved Agility total ankle arthroplasty systems. Podium presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2009.

**Vaupel Z**, Baker K, Kurdziel M, Wiater, JM. Wear Simulation of Reverse Total Shoulder Arthroplasty Systems: Effect of Glenosphere Design. Podium Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2010.

**Vaupel Z**, Erdogan, M, Sanders RW. The Outcome of Displaced Intra-Articular Calcaneal Fractures Treated Operatively Using an Extensile Lateral Approach and a Plate and Screw Construct: Long-Term Results. Podium Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2012.

**Vaupel Z** and Fortin P. Foot and Ankle Injuries in Competitive Slalom Water Skiers. Poster Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2012.

Pomajzl R, Baker E, Baker K, **Vaupel Z**, Fortin P. Clinical, Radiographic, Histologic and Immunohistochemical Characterization of Failed Fresh Osteochondral Allografts of the Talus. Podium Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2014.

Green G, Baker E, Salisbury M, Baker K, **Vaupel Z**, Fortin P. Radiographic and Damage Mode Analyses of Nine Retrieved Salto Talaris Total Ankle Prostheses. Poster Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2014.

**Vaupel Z**, Baker E, Salisbury M, Padley M, Anderson J, Bohay D, Baker K, Fortin P. Retrieval Analyses of Total Ankle Arthroplasty Prostheses. Podium Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2014.

Green G, **Vaupel Z**, Baker E, Baker K, Anderson J, Bohay D, Fortin P. Multi-Center Retrieval Study of *In Vivo* Damage and Failure of Total Ankle Arthroplasty System. Podium Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2015.

**Vaupel Z**, Baker E, Baker K, Anderson J, Bohay D, Fortin P. Inflammatory Cytokine and Chemokine Expression in Periprosthetic Tissue Adjacent to Failed Total Ankle Arthroplasty Components. Podium Presentation. Michigan Orthopaedic Society Annual Scientific Meeting, 2015.

**PRESENTATIONS (Local)**

**Vaupel ZM**, Lavagnino M, Tian T, Arnoczky SP: The effect of amplitude and frequency of cyclic tensile stress on the inhibition of MMP-1 expression in rat tail tendon cells. Podium Presentation. Michigan State University Flint Area Medical Education Community Research Forum, 2003.

**Vaupel Z**, Baker E, Baker K, Kurdziel M, Fortin P. Radiographic and damage mode analyses of retrieved Agility total ankle arthroplasty systems. Podium Presentation. Detroit Academy of Orthopaedic Surgeons Annual Scientific Meeting, 2009.

**Vaupel Z**, Baker K, Kurdziel M, Wiater, JM. Wear Simulation of Reverse Total Shoulder Arthroplasty Systems: Effect of Glenosphere Design. Podium Presentation. William Beaumont Hospital 40th Annual Resident/Fellow Research Forum, 2010.

**Vaupel Z**, Baker K, Kurdziel M, Wiater, JM. Wear Simulation of Reverse Total Shoulder Arthroplasty Systems: Effect of Glenosphere Design. Podium Presentation. Detroit Academy of Orthopaedic Surgeons Annual Scientific Meeting, 2010.

**Vaupel Z**, Erdogan M, Sanders R. Outcome of displaced intra-articular calcaneal fractures treated operatively using an extensile lateral approach and a lateral plate and screw construct: long-term results. Podium Presentation. Foundation for Orthopaedic Research and Education: Annual Fellow’s Day, 2011.

**INVITED LECTURES**

**Vaupel Z**. Foot and Ankle Injuries in Athletes. 4th Annual Michigan State Medical Society Sports Medicine Symposium. Detroit, MI 1/25/2012.

**Vaupel Z**, Osteochondral Lesions of the Talus. Detroit Medical Center Sports Medicine Visiting Lectureship. Detroit, MI 5/7/2014.

**Vaupel Z**, Lateral Ankle Instability. Detroit Medical Center Sports Medicine Visiting Lectureship. Detroit, MI 5/7/2014.

**Vaupel Z**. Lisfranc Injuries. Detroit Medical Center Department of Orthopaedic Surgery Grand Rounds. Detroit, MI 12/17/14.

**Vaupel Z**, Lisfranc Injuries: Diagnosis and Treatment. Detroit Medical Center Sports Medicine 7th Annual Detroit Regional Sports Medicine Symposium. Detroit, MI 7/30/15.

**Vaupel Z**, Displaced Intraarticular Calcaneus Fractures. Detroit Medical Center Department of Orthopaedic Surgery Grand Rounds. Detroit, MI 3/3/16.

**Vaupel Z**, Posterior Malleolus Fractures. Detroit Medical Center Department of Orthopaedic Surgery Resident Lecture Series. Detroit, MI 4/27/16.

**Vaupel Z,** Moderator – Foot and Ankle Research Presentations

Michigan Orthopaedic Society Annual Scientific Meeting. Mackinac Island, MI 6/19/16.

**Vaupel Z**, Lisfranc Injuries. University of Michigan Foot and Ankle Course. Ann Arbor, MI 10/21/16.

**Vaupel Z**, Current Update on Treatment of Syndesmotic Injuries. Michigan Orthopaedic Society Annual Scientific Meeting. Mackinac Island, MI 6/16/17.

**Vaupel Z**, Osteochondral Lesions of the Talus. Michigan Orthopaedic Society Fall Education Meeting. Rochester Hills, MI 10/26/17.

**Vaupel Z**, Primary Arthrodesis of Lisfranc Injuries. Michigan Orthopaedic Society Annual Scientific Meeting. Mackinac Island, MI 6/22/18.

**Vaupel Z**, Lisfranc Injuries. Michigan State University College of Human Medicine Spectrum Health Department of Orthopaedic Surgery Grand Rounds. Grand Rapids, MI 10/9/19.

# TEACHING

2011 – Present Director of Medical Student Orthopaedic Education

Department of Orthopaedic Surgery

William Beaumont Hospital

Royal Oak, MI

2012 – Present Advisor – Orthopaedic Surgery and Sports Medicine Group

Oakland University William Beaumont School of Medicine

Rochester, MI

2014 – Present Mentor – M3 Students Pursuing Careers in Orthopaedic Surgery

Oakland University William Beaumont School of Medicine

Rochester, MI

# SERVICE

2009 – 2010 Chief Resident

William Beaumont Hospital

Department of Orthopaedic Surgery

Royal Oak, MI

2013 – Present Member – Resident Core Competency Committee

Oakland University William Beaumont School of Medicine

Department of Orthopaedic Surgery

Royal Oak, MI

2014 – Present Member – Program Evaluation Committee

Oakland University William Beaumont School of Medicine

Department of Orthopaedic Surgery

Royal Oak, MI

2015 – 2020 Member – Public Education Committee

American Orthopaedic Foot and Ankle Society

Rosemont, IL

2015 – Present Reviewer – Journal American Academy of Orthopaedic Surgeons

American Academy of Orthopaedic Surgeons

Rosemont, IL

2016 Assistant Coach

i9 Sports – Spring Baseball League

Farmington Hills, MI

2017 Assistant Coach

National Flag Football League, Lombardi Division

Farmington Hills, MI

2017 Head Coach

Bloomfield Baseball League, Spring Season, Shetland Division

Bloomfield Hills, MI

2018 Head Coach

Bloomfield Baseball League, Spring Season, Pinto Division

Bloomfield Hills, MI

2018 Head Coach

Bloomfield Baseball League, Spring Season, Shetland PreK Division

Bloomfield Hills, MI

2018 – Present Chairman – Security Committee

St. Hugo of the Hills School

Bloomfield Hills, MI

2019 – Present Member – Protocol Review Committee

Oakland University William Beaumont School of Medicine

Department of Orthopaedic Surgery

Royal Oak, MI

2019 Head Coach

Bloomfield Baseball League, Spring Season, Pinto I Division

Bloomfield Hills, MI

2019 Head Coach

Bloomfield Baseball League, Spring Season, Pinto II Division

Bloomfield Hills, MI

2019 Head Coach

Play 4 Fun Sports Flag Football, Fall Season, K/1st Grade Division

Birmingham, MI

2020 Head Coach

Bloomfield Baseball League, Spring Season, Mustang Division

Birmingham, MI

2020 Head Coach

Play 4 Fun Sports Flag Football, Winter Season, 1st Grade Division

Birmingham, MI

2020 Head Coach

Play 4 Fun Sports Flag Football, Fall Season, 2nd/3rd Grade Division

Birmingham, MI

2021 Head Coach

Play 4 Fun Sports Flag Football, Winter Season, 2nd Grade Division

Birmingham, MI

2021 Assistant Coach

Catholic Youth Organization

St. Hugo of the Hills School, 4th Grade Girls’ Basketball

Bloomfield Hills, MI

# RESEARCH/GRANTS

**Current Research Projects:**

2013 – Present **Vaupel Z**, Baker K, Baker E, Fortin P. Effect of Reamer Irrigator Aspirator (RIA) on the Mechanical Properties of the Tibia

2013 – Present Carpenter S, Baker E, **Vaupel Z**, Fortin P. Effect of Chemokines and Neupogen on Achilles Tendon Repair in a Rat Model.

2015 – Present **Vaupel Z**, Baker E, Baker K, Fortin P. Impact of Non-weight Bearing on Quality of Life.

2019 – Present **Vaupel Z**, Fortin P. Immediate Post-operative Weight Bearing Following Extra-articular Screw Fixation for Lisfranc Injuries.

2020 – Present El-Zein Z, Fortin P, **Vaupel Z**. Utility and Cost Analysis of Intra-operative Fungal and AFB Cultures for Foot and Ankle Infections.

**Grants:**

2008 – 2010 American Shoulder and Elbow Surgeons 2008 Research Grant –

$20,000

The influence of design features on the wear performance of reverse total shoulder arthroplasty systems: An *in vitro* wear

simulation.

Wiater JM,Baker K, **Vaupel Z**, Demetropoulos D.

2010 – 2011 Beaumont Hospitals Resident/Fellow Mini-Grant - $10,000

#### Effect of Bisphosphonates on Osteochondral Allograft Incorporation

**Vaupel Z**, Baker K, Gratopp C, Fortin P

2015 Synthes/Depuy - $25,000

**Vaupel Z**, Baker K, Baker E, Fortin P. Effect of Reamer Irrigator Aspirator (RIA) on the Mechanical Properties of the Tibia