

CURRICULUM VITAE

Nathan P. Heinzerling, MD
Akron Children's Hospital
Pediatric Surgeon
Assistant Trauma Medical Director

OFFICE ADDRESS: 215 W Bowery St.
Akron, OH 44308

EDUCATION:

08/2001 – 06/2005 **University of Illinois, Urbana-Champaign, IL**
Bachelor of Science in Molecular and Cellular Biology
Minor in Chemistry

Distinction for research of the down-regulation of the CD3 zeta-chain in tumor infiltrating CD8 T-cells

06/2003 – 08/2003 **College of DuPage, Glen Ellyn, IL**
Emergency Medical Technician Licensure

08/2005 – 06/2009 **Rush University, Chicago, IL**
Doctor of Medicine

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

07/2009 – 06/2010 **Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI**
Internship, General Surgery

07/2010 – 06/2012 **Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI**
Junior Resident, General Surgery

07/2012 – 06/2014 **Children's Hospital of Wisconsin, Milwaukee, WI**
Senior Resident, Division of Pediatric Surgery

07/2012 – 06/2014 **Children's Hospital of Wisconsin, Milwaukee, WI**
Research Fellow, Division of Pediatric Surgery
Primary Investigator: David Gourlay, MD and Amy Wagner, MD

07/2014 – 06/2016 **Medical College of Wisconsin Affiliated Hospitals, Milwaukee, WI**
Senior Resident, General Surgery

08/2016 – 07/2108 **Northwell Health Cohen Children's Medical Center**

**New Hyde Park, NY
Fellow, Pediatric Surgery**

CURRENT POSITION:

**08/2020 – current Assistant Trauma Medical Director
Akron Children’s Hospital**
**09/2020 – current Surgical Director of PICU
Akron Children’s Hospital**

SPECIALTY BOARDS AND CERTIFICATION:

| Board Certification | Issue Date |
|--|-------------------|
| American Board of Surgery Pediatric Surgeon | Pending |
| American Board of Surgery General Surgeon | 11/2016 |
| United States Medical Licensing Examination | 09/2010 |

| Certificates | Issue Date |
|--|-------------------|
| Basic Emergency Medical Technician | 08/2010 |
| Advanced Cardiac Life Support Provider | 04/2016 |
| Advanced Trauma Life Support Provider | 04/2016 |
| Advanced Trauma Life Support Instructor | 04/2013 |
| Pediatric Advanced Life Support | 05/2016 |

| Licensure | Number | Issue Date | Expiration |
|----------------------------------|-------------------|-------------------|-------------------|
| Ohio Medical License | 35.134297 | 06/13/2018 | 10/01/2020 |
| New York Medical License | 284234 | 05/04/2016 | 05/04/2020 |
| Wisconsin Medical License | 55314-20 | 10/01/2015 | 10/31/2017 |
| United States DEA | | 10/01/2018 | 10/31/2020 |
| United States NPI | 1316189574 | | |

AWARDS AND HONORS

11/2005 Corporate Partnership Award
Received by RU Caring while in leadership for our community work.
Rush University Medical College

5/2007 AMA Award for Outstanding Community Service Project
Received for our annual RU Caring health fair.
Rush University Medical College

3/2007 Exemplary Volunteer Effort
Awarded to Rush University by the US Department of Labor for RU
Caring’s community service through health fairs and tutoring
programs.
Rush University Medical College

- 05/2009** **Otho Sprague/Whitney Addington Award**
Rush University Medical College
- 05/2009** **Gold Humanism Honor Society**
Rush University Medical College
- 05/2011** **Barney Becker Resident Teaching Award Nominee**
Medical College of Wisconsin

MEMBERSHIPS IN HONARY AND PROFESSIONAL SOCIETIES:

- 09/2005** **American Medical Association**
- 05/2009** **Gold Humanism Honor Society**
- 07/2009** **American College of Surgeons**
- 08/2013** **Society of American Gastrointestinal and Endoscopic Surgeons**
- 08/2013** **Wisconsin Surgical Society**
- 08/2012** **Wisconsin Medical Society**
- 09/2015** **American Pediatric Surgery Association**
- 01/2019** **American Academy of Pediatrics**

LOCAL/REGIONAL APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

Akron Children’s Hospital

- 10/2018 – current** **Cancer Committee surgical liaison**
- 09/2019 – current** **Perioperative Quality Improvement Committee**
- 12/2018 – current** **Epic Order Set Review Committee**
- 03/2019 – current** **ECMO committee surgical liaison**
- 11/2018 – current** **Trauma Peer Review Committee**
- 08/2019 – current** **Trauma Program Operational Process Performance (TPOPP) Committee**

Regional Trauma Committee

- 08/2020 – current** **Northeastern Ohio Regional Trauma Network (NORTN)**

Northeast Ohio Medical University

- 10/2019 – present** **Clinical Instructor**

Cohen Children’s Medical Center

- 08/2016 – 07/2018** **Clinical Instructor of Pediatric Surgery**

Medical College of Wisconsin:

07/2012 – 06/2014 Instructor in the Department of Surgery, Division of Pediatric Surgery
07/2013 – 06/2014 Housestaff Health and Wellness Committee Co-chairperson
04/2014 - 09/2014 Operating Room Turnover Initiative Team
Rush University Medical College

12/2005-06/2009 Rush University Caring, Co-leader and Steering committee member
12/2005-06/2009 Surgery Interest Group Member
01/2006-06/2009 Rush Community Service Initiative Program
04/2006-04/2007 Door of Hope Mission, Steering and Planning Committee member
09/2006-06/2009 Marrilac House, Steering and Planning Committee member
12/2006-06/2009 HIV Big Sibs

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

PEER REVIEWED WORKSHOPS/PRESENTATIONS:

International

Heinzerling NP, Liedel JL, Welak SR, Fredrich K, Gourlay DM. “IAP Decreases LPS Bioavailability and TLR4 Expression in a Rat Model of Necrotizing Enterocolitis.” Pediatric Academic Society Surgical Forum. Vancouver, Canada. May 2014.

Heinzerling NP, Donohoe D, Gourlay DG, Liedel JL. “IL-23 Increases Rat Pup Intestinal Permeability.” Pediatric Academic Society Poster Presentation. Vancouver, Canada. May 2014.

Heinzerling NP, Donohoe D, Gourlay DG, Liedel JL. “IL-23 Increases Intestinal Epithelial Cell Permeability *In Vitro*.” European Pediatric Surgery Association Surgical Forum. Dublin, Ireland. June 2014

National

Heinzerling NP, Welak SR, Liedel JL, Fredrich K, Pritchard KA, Oldham KT, Gourlay DM. “Enteral IAP Reduces Biologically Active LPS and TLR4 Expression in the Rat Model of Necrotizing Enterocolitis.” American College of Surgeons 99th Clinical Congress for Surgical Forum. Washington, DC. October 2013.

Heinzerling NP, Welak SR, Liedel JL, Fredrich K, Pritchard KA, Oldham KT, Gourlay DM. “Intestinal Alkaline Phosphatase is Protective to the Preterm Rat Pup

Intestine.” American Academy of Pediatrics Rosenkrantz Research Competition. Orlando, FL. October 2013.

Heinzerling NP, Miller J, Guerts A, Welak S, Fredrich K, Gourlay DM. “Absence of Intestinal Alkaline Phosphatase Leads to Neonatal Intestinal Inflammation.” American Academy of Pediatrics Rosenkrantz Research Competition. San Diego, CA. October 2014.

Rajapreyar P, Heinzerling NP, Donohoe D, Liedel JL. “Serum IFN γ Increases Following Enteral IL-23.” Society of Critical Care Medicine. Phoenix, AZ. January 2015.

Heinzerling NP, Christensen MA, Swedler R, Cassidy LD, Calkins CM, Sato TT. “Safe and Effective Management of Esophageal Coins in Children with Bougienage.” American Pediatric Surgery Nurse’s Association. San Diego, CA. May 2016.

Regional

Heinzerling NP, Welak SR, Liedel JL, Fredrich K, Pritchard KA, Oldham KT, Gourlay DM. “Enteral IAP Reduces Biologically Active LPS and TLR4 Expression in the Rat Model of Necrotizing Enterocolitis.” Midwest Society of Pediatric Research. Minneapolis, MN. October 2013.

Heinzerling NP, Welak SR, Liedel JL, Fredrich K, Pritchard KA, Oldham KT, Gourlay DM. “Intestinal Alkaline Phosphatase is Protective to the Preterm Rat Pup Intestine.” Wisconsin Surgical Society. Kohler, WI. November 2013.

Heinzerling NP, Swedler R, Christensen M, Schenider JG, Calkins C, Sato TT. “Safe and Effective Management of Pediatric Esophageal Coins with Bougienage.” Best Practices in Pediatrics. Wisconsin Dells, WI. March 2014.

Heinzerling NP, Miller J, Guerts A, Welak S, Fredrich K, Gourlay DM. “Absence of Intestinal Alkaline Phosphatase Leads to Neonatal Intestinal Inflammation.” Wisconsin Surgical Association. Kohler, WI. November 2014.

Heinzerling NP, Christensen MA, Swedler R, Cassidy LD, Calkins CM, Sato TT. “Safe and Effective Management of Esophageal Coins in Children with Bougienage.” Central Surgical. Chicago, IL. March 2015.

Local

Heinzerling NP, Welak SR, Liedel JL, Fredrich K, Pritchard KA, Oldham KT, Gourlay DM. “The Effect of Intestinal Alkaline Phosphatase on TLR4 in

Necrotizing Enterocolitis.” Pediatric Surgery Multidisciplinary Research Conference. May 2013.

Heinzerling NP, Welak SR, Liedel JL, Fredrich K, Pritchard KA, Oldham KT, Gourlay DM. “The Effect of Intestinal Alkaline Phosphatase on TLR4 in Necrotizing Enterocolitis.” Milwaukee Academy of Surgery Resident Research Conference. November 2012.

Heinzerling NP, Welak SR, Liedel JL, Fredrich K, Pritchard KA, Oldham KT, Gourlay DM. “Intestinal Alkaline Phosphatase is Protective in the Preterm Rat Pup Intestine.” 2013 Department of Surgery Condon-Donagan Research Presentations, Medical College of Wisconsin, June 2013.

Heinzerling NP, Wagner AJ. “Percutaneous Coverage of Fetal Myelomeningocele.” Children’s Hospital of Wisconsin Multidisciplinary Conference. January 2014.

Heinzerling NP, Miller J, Guerts A, Welak S, Fredrich K, Gourlay DM. “Absence of Intestinal Alkaline Phosphatase Leads to Neonatal Intestinal Inflammation.” 2014 Department of Surgery Condon-Donagan Research Presentations, Medical College of Wisconsin, June 2014.

Heinzerling NP, Miller J, Guerts A, Welak S, Fredrich K, Gourlay DM. “Absence of Intestinal Alkaline Phosphatase Leads to Neonatal Intestinal Inflammation.” 2014 Medical College of Wisconsin Research Day. Milwaukee, WI. September 2014.

MEDICAL COLLEGE TEACHING ACTIVITIES:

Medical Student Education

07/2012 – 06/2014 Instructor, Department of General Surgery. Professor Rounds. Moderating student led oral presentations.

07/2012 – 06/2014 Instructor, Department of General Surgery. Surgical skills workshops for third year medical students.

Resident and Fellow Education

07/2012 – 06/2014 Instructor, Department of General Surgery. PGY-1 Curriculum basic science and clinical skills.

07/2012 – 06/2014 Instructor, Department of General Surgery. PGY-2 Curriculum basic science and clinical skills.

04/2013 – 06/2014 Instructor, Division of Trauma. Advanced Trauma Life Support

**08/2016 – present Instructor, Division of Pediatric Surgery, Northwell Health
Cohen Children’s Medical Center**

Continuing Medical Education

**04/2013 – 06/2014 Instructor, Division of Trauma. Advance Trauma Life
Support**

COURSES

**The Association for Academic Surgery 8th Annual Career Development Course.
Chicago, IL. September 2012.**

**The Association for Academic Surgery 8th Annual Fundamentals of Surgical
Research Course. Chicago, IL. September 2012.**

**Ultrasound for Pediatric Surgeons. American College of Surgeons. Chicago, IL.
October 2015.**

Advanced Pectus Course. The University of Arizona. Phoenix, AZ. October 2019.

BIBLIOGRAPHY

**Heinzerling NP, Wagner AJ. “Prenatal Diagnosis and Therapy for
Myelomeningocele.” In Editors: Brad Fetis, MD, PhD and Christopher Muratore,
MD. Fetal Diagnosis and Therapy: A Reference Handbook for Pediatric Surgeons.
Committee of the American Pediatric Surgical Association. April 2013.**

**Heinzerling NP, Sato TT. “Pediatric Vascular Injuries.” Editors: Dua A, Desai SS,
Holcomb JB, Burgess AR, Freischlag JA. Clinical Review of Vascular Trauma.
26:331-343. November 2013.**

**Heinzerling NP, Liedel JL, Welak SR, Fredrich K, Biesterveld BE, Pritchard KA,
Gourlay DG. “Intestinal alkaline phosphatase is protective to the preterm rat pup
intestine.” *Journal of Pediatric Surgery.* June 2014.**

**Heinzerling NP, Wagner AJ. “Current and Future Management of
Myelomeningocele.” *Surgery Update: Leading the Way.* 6:2 June 2014.**

**Heinzerling NP, Donohoe D, Gourlay DG, Liedel JL. “IL-23 Increases Intestinal
Epithelial Cell Permeability *In Vitro.*” *European Journal of Pediatric Surgery.* 2015
May 22. Epub.**

**Heinzerling, NP. (2014). Index. *The Medical College of Wisconsin Handbook for
Care of the Ill Newborn and Infant in the NICU,* 7th ed. (pp 351-357) Ed. Das UG,
Liedel JL, Welak SR and Heinzerling NP.**

Welak SR, Rentea RM, Teng RJ, Heinzerling NP, Biesterveld BB, Liedel JL, Pritchard KA, Fredrich K, Gourlay DM. "Intestinal NADPH Oxidase 2 Activity Increases in a Neonatal Rat Model of Necrotizing Enterocolitis." Public Library of Science One. Submitted October 2014.

Biesterveld BE, Koehler SM, Heinzerling NP, Rentea RM, Fredrich K, Welak SR, Gourlay DM. "Intestinal Alkaline Phosphatase to Treat Necrotizing Enterocolitis. Journal of Surgical Research. 2015 June 15;196(2):235-40.

Heinzerling NP, Christensen MA, Swedler R, Cassidy LD, Calkins CM, Sato TT. "Safe and Effective Management of Esophageal Coins in Children with Bougienage." Surgery. 2015 Oct; 158(4): 1065-72.

Heinzerling NP, Koehler SM, Szabo S, Wagner AJ. "Pediatric Granular Cell Tumor of the Breast: A Case Report and Review of the Literature." Case Reports in Surgery. 2015:568940. Epub 2015 Sep 27.