

# Curriculum Vitae

## Ryan A. Heksch, M.D.

215 W. Bowery St. Suite 6400 • Akron, OH 44308

### EMPLOYMENT

- 08/2019 – present      **Akron Children’s Hospital, Akron, OH**  
Pediatric Endocrinology faculty  
Clinical Assistant Professor of Pediatrics at Northeast Ohio Medical University  
Site Endocrinologist, Certified Duchene Care Center (CDCC) at Akron Children’s Hospital  
Core Faculty of the Pediatric Residency Program  
Preceptor for Child and Adolescent Psychiatry Elective Rotation in Pediatric Endocrinology
- 01/2017 – 04/2019      **Nationwide Children’s Hospital, Columbus, OH**  
Urgent Care Physician Moonlighter

### EDUCATION

- 07/2016 – 06/2019      **Pediatric Endocrinology Fellowship**  
Nationwide Children’s Hospital, Columbus, OH
- 05/2018 – 05/2019      **Certificate in Medical Education**  
University of Cincinnati, Cincinnati, OH
- 07/2013 – 06/2016      **Pediatric Residency**  
Nationwide Children’s Hospital, Columbus, OH
- 08/2009 – 05/2013      **Doctor of Medicine**  
The Ohio State University College of Medicine, Columbus, OH  
*cum Laude*
- 09/2004 – 06/2009      **Bachelor of Science in Business Administration**  
The Ohio State University, Columbus, OH  
*Magna cum Laude*  
Minors in Physics and Life Sciences

### STATE LICENSURE & CERTIFICATIONS

- 2013 – present      State Medical Board of Ohio Licensure (Active)  
2016      American Board of Pediatrics, Pediatrics Certifying Exam  
2019      American Board of Pediatrics, Pediatric Endocrinology Certifying Exam

### SERVICE

#### **NATIONAL**

- 07/2017 – present      **Member**  
**Drug & Therapeutics/Rare Diseases Committee, Pediatric Endocrine Society**  
**Diazoxide Safety Sub-Committee**  
The goal of this committee is to provide guidelines on both new and existing drugs and devices and to review problems related to the therapeutics of Pediatric Endocrine disorders.
- 07/2017 – 06/2019      **Member**  
**Fellows Committee, Pediatric Endocrine Society**  
The goal of this committee is to provide endocrinology fellows across the US a forum for discussion relating to career development and for networking.

## **INSTITUTIONAL**

- 09/2019 – present      **Core Faculty to the Pediatric Residency  
Pediatric Residency Education Subcommittee  
Akron Children’s Hospital Pediatric Residency Program**  
Involvement with the residency program, interviewing residency candidates, serving on committees and overseeing residents’ evaluations and advancement
- 04/2020 – present      **Committee Lead  
Endocrinology Department TeleHealth Committee**  
This committee meets monthly to discuss how to incorporate TeleHealth into our department.
- 04/2020 – present      **Faculty Mentor  
Morbidity and Mortality Conference**  
Organized the creation of an M&M conference for the Akron Children's Hospital residency program, mentoring monthly resident presenter
- 07/2017 – 06/2019      **Member  
Endocrinology Department Quality Improvement Committee**  
This committee meets twice a month to review all ongoing QI projects within the department.
- 08/2013 – 06/2015      **Member  
House Staff Advisory Committee, Nationwide Children’s Hospital residency program**  
The objective of this committee is to facilitate communication between residents and program leadership, and to assist in development of services and programs for residents.
- 10/2010 – 03/2013      **Member, Interviewer  
Ohio State University College of Medicine Admissions Committee**  
This committee interviews potential candidates for the medical school and participates in the selection process.

## **HONORS, AWARDS, AND CERTIFICATIONS**

- 06/2020      Golden Apple Teaching Award Honorary Mention (from Akron Children’s residents)
- 05/2018      Pediatric Endocrine Society Presidential Poster (one of top-ranking trainee posters at PES conference 2018)
- 03/2018      Nationwide Children’s Hospital Department of Pediatrics Advanced Degree Funding Program
- 04/2017      BCLS, ACLS, and PALS certified (valid until April 2021)
- 02/2015      Nationwide Children’s Hospital Trainee Travel Award
- 05/2013      Antoinette Eaton Award (for leadership in departmental and medical school activities focused on advocacy for children’s health), Ohio State University College of Medicine
- 05/2011      Medical Alumni Society Community Service Award, Ohio State University College of Medicine
- 05/2011      100 Hours of Community Service Award, Ohio State University College of Medicine

## **PUBLICATIONS**

### **JOURNAL ARTICLES**

**Heksch R**, Bowden S, Hoffman R. Novel function of adrenocorticotrophic hormone in the stimulation of vascular endothelial growth factor release in healthy children and adolescents: A Proof-of-Concept Study. [Accepted to *Annals of Pediatric Endocrinology*, October 2020]

Brar PC\*, **Heksch R\***, Cossen K, De Leon D, Kamboj M, Marks S, Marshall B, Miller R, Page L, Stanley T, Mitchell D, Thompson P. Management and appropriate use of diazoxide in infants and children with hyperinsulinism 2020 Aug 18. *J Clin Endocrinol Metab*. Volume 105, Issue 12, December 2020, dgaa543. doi:10.1210/clinem/dgaa543. PubMed PMID: 32810255. [Published] [Role: \*Co-first author] [Working group with the PES Drugs and Therapeutics committee] [I contributed to literature review, organization, composition of tables and figures, and initial through final drafts of the manuscript] [Percent authorship: 20%]

**Heksch RA**, Matheson MA, Tishelman AC, Swartz JM, Jayanthi VR, Diamond DA, Harrison CJ, Chan YM, Nahata L. Testicular Regression Syndrome: Practice Variation in Diagnosis and Management. *Endocr Pract.* 2019 Aug;25(8):779-786. doi: 10.4158/EP-2019-0032. PubMed PMID: 31013155. [Published] [Role: First author] [I contributed to literature review, organization, statistics, and initial through final drafts of the manuscript] [Percent authorship: 60%]

**Heksch R**, Henry RK. Myxedema Coma due to Hashimoto Thyroiditis: A Rare but Real Presentation of Failure to Thrive in Infancy. *Horm Res Paediatr.* 2018 May 4:1-5. doi: 10.1159/000488467. PubMed PMID: 29730659. [Published] [Role: First author] [I contributed to literature review, organization, and initial through final drafts of the case report] [Percent authorship: 60%]

**Heksch R**, Kamboj M, Anglin K, Obrynba K. Review of Prader-Willi syndrome: the endocrine approach. *Transl Pediatr.* 2017 Oct; 6(4):274-85. doi: 10.21037/tp.2017.09.04. PubMed PMID: 2973065929184809. [Published] [Role: First author] [I contributed to literature review, organization, and initial through final drafts of the review article] [Percent authorship: 60%]

Callendret B, Bukh J, Eccleston HB, **Heksch R**, Hasselschwert DL, Purcell RH, et al. Transmission of clonal hepatitis C virus genomes reveals the dominant but transitory role of CD8(+) T cells in early viral evolution. *J Virol.* 2011 Nov;85(22):11833-45. doi: 10.1128/JVI.02654-10. PubMed PMID: 21900166. [Published] [Role: Lab assistant] [I performed bench-work including DNA transcription, cell transformation in Walker Lab at Nationwide Children's Hospital] [Percent authorship: 5%]

## ARTICLES SUBMITTED

Regelmann M, Kamboj M, **Heksch R**, Gupta A, Gourgari E, Matlock K, Krishnan S, Adhikari S, Conroy R, Guttman-Baumann I, Lahoti A. Pediatric Endocrinology Out-Patient Practice in the Time of COVID-19: Considerations for the Rapid Implementation of Telemedicine and Management of Pediatric Endocrine Conditions. (Pediatric Endocrine Society Review, Drugs and Therapeutics Committee) [Currently under review]

## ARTICLES IN PREPARATION

Sarafoglou K, Regelmann M, Kamboj M, Stanley T, McGill D, **Heksch R**, Gupta A, Raman V, Mehta S, Geffner M. Glucocorticoid formulations in the treatment of congenital adrenal hyperplasia during childhood. (Pediatric Endocrine Society Review, Drugs and Therapeutics Committee)

## ABSTRACTS

**Heksch R**, Blunden C, Gandhi K. Knowledge and Attitudes about Pediatric Endocrinology: A Survey of Pediatric Residents.

- Poster presentation *was to be given at* the 2020 Pediatric Endocrine Society Annual Meeting, April 24-27, 2020, Fort Worth, TX. *Conference canceled (due to COVID-19)*.
- Abstract published in *Hormone Research in Pediatrics: Horm Res Paediatr* 2020;93:1-185. doi: 10.1159/000509576.

Patel N, **Heksch R**, Thompson M, Young C, Bowden S. Knowledge of adrenal crisis prevention and utility of medical identification in patients with adrenal insufficiency – A Follow Up. [Quality Improvement Project]

- Poster presented at OSU Research Retreat, Columbus, OH, November 2019 by N Patel [awarded Best Poster]
- Poster presentation *was to be given at* the 2020 Pediatric Endocrine Society Annual Meeting, April 24-27, 2020, Fort Worth, TX. *Conference canceled (due to COVID-19)*.
- Abstract published in *Hormone Research in Pediatrics: Horm Res Paediatr* 2020;93:1-185. doi: 10.1159/000509576.

**Heksch R**, Bowden S, Hoffman R. Adrenocorticotrophic hormone stimulates vascular endothelial growth factor release in healthy children and adolescents. [Prospective study]

- Oral Presentation at Midwest Society of Pediatric Research Conference. Detroit, MI, October 2018.
- Poster presentation at OSU Research Retreat, Columbus, OH, November 2018.
- Oral Presentation at the NCH Pediatric Fellows Day, Columbus, OH, May 2019.

**Heksch R**, Chan YM, Tishelman A, Swartz J, Jayanthi R, Harrison C, Matheson M, Nahata L. Testicular Regression Syndrome: Practice Variation in Diagnosis and Management. [Retrospective Chart Review]

- Oral Presentation at the Disorders of Sexual Differentiation (DSD) committee meeting at the Pediatric Academic Societies Conference. Toronto, ON, Canada, May 2018.
- Poster presented at Pediatric Academic Societies Conference. Toronto, ON, Canada, May 2018.

**Heksch R**, Thompson M, Young C, Bowden S. Knowledge of adrenal crisis prevention and utility of medical identification in patients with adrenal insufficiency. [Quality Improvement Project]

- Poster presented at Pediatric Academic Societies Conference and was chosen for presentation at the Pediatric Endocrine Society Presidential Poster Reception. Toronto, ON, Canada, May 2018.

**Heksch R**, Henry RK. Myxedema coma due to Hashimoto's thyroiditis: A rare but real presentation of failure to thrive in infancy. [Case report]

- Poster presented at the 10th International Meeting of Pediatric Endocrinology, Washington DC, September 2017.
- Poster presented at Nationwide Children's Hospital Grand Rounds Poster of the Week, Columbus, OH, July 2018.

**Heksch R**, Bowden S. Fracture and Bone Mineral Density Outcomes after Bisphosphonate Discontinuation in Children with Osteogenesis Imperfecta Treated with Pamidronate Compared to Zoledronic Acid. [Retrospective Chart Review]

- Poster presented at Pediatric Academic Societies Conference, San Diego, CA, April 2015.
- Poster presented at Ohio State Research Day, Columbus, OH, 2015.
- Poster presented at NCH Poster of the Week. Columbus, OH, 2016.

**Heksch R**, Bowden S. Bone Mineral Density and Clinical Outcomes after Intravenous Bisphosphonate Discontinuation in Children with Osteogenesis Imperfecta. [Retrospective Chart Review]

- Poster presented at Pediatric Academic Societies Conference. San Diego, CA, April 2015.
- Poster presented at Ohio State Research Day, Columbus, OH, 2015.

## **INSTITUTIONAL: CLINICAL PRACTICE GUIDELINES/ALGORITHMS**

**Heksch R**, Coven S, Kuhn A, Olshefski R, Bowden S, Kamboj K. Standardization of Steroid Tapering for Hematology/Oncology/BMT Patients on Extended-Course Therapy. November 2017. [Available for use on Nationwide Children's Hospital intranet] [Role: Primary author] [Created guideline for the tapering of prolonged steroid courses and testing the adrenal axis for Hematology/Oncology department at Nationwide Children's Hospital] [Percent authorship: 60%]

**Heksch R**, Kamboj M, Merandi J. Diabetes Mellitus/Insulin Patient admit algorithm. [Available for use on Nationwide Children's Hospital intranet] [Role: Primary author] [Created algorithm to assist in guiding admission placement for patients on insulin] [Percent authorship: 30%]

## **GRANTS**

06/2017                      Nationwide Children's Hospital Intramural Grant awarded, \$10,000  
Grant #2011511  
Project: Effect of adrenocorticotrophic hormone on vascular epithelial growth factor release in healthy children and adolescents

## **RESEARCH**

### **CURRENT/IN-PROGRESS**

12/2018 – present            **Medical Education Project**  
Nationwide Children's Hospital, Columbus, OH

- Survey of Pediatric Resident Attitudes and Knowledge in Pediatric Endocrinology
- Curriculum formation of online modules for general endocrinology topics

### **COMPLETED**

06/2017 – 09/2020            **Principal Investigator**, Prospective Cohort Study  
Nationwide Children's Hospital, Columbus, OH

- Nationwide Children's Hospital Intramural Grant awarded, \$10,000
- Co-PI: Robert Hoffman, MD
- Title: Effect of adrenocorticotrophic hormone on vascular epithelial growth factor release in healthy children and adolescents
- Description of Role: I am responsible for designing the protocol, obtaining IRB approval and grant funding, recruitment of subjects, data collection and analysis, and writing manuscript.

- 06/2017 – 06/2019      **Principal Investigator**, Quality Improvement Project  
 Nationwide Children’s Hospital, Columbus, OH
- Co-PIs: Sasigarn Bowden, MD, Michael Thompson, MD
  - Title: Importance of stress dose teaching and wearing medical identification in patients with adrenal insufficiency
  - Description of Role: I contributed to dissemination of questionnaire, data organization and analysis, and writing manuscript.
  - Outcome: Created of tool for better in-clinic and continuing patient education, Adrenal Insufficiency Action Plan.
- 04/2016      **Quality Improvement Project**  
 Nationwide Children’s Hospital, Columbus, OH
- Chart review: evaluating the frequency of lipid profiles obtained in Nationwide Children’s primary care clinics from age 9-11 years, according to the AAP recommendation.
- 04/2014      **Quality Improvement Project**  
 Nationwide Children’s Hospital, Columbus, OH
- Chart review: evaluating sources of error in obtaining newborns’ discharge summaries at the first clinic visit.
- 04/2009 – 08/2009      **Research Assistant**  
 Walker Lab, Nationwide Children’s Hospital, Columbus, OH
- Bench-work research: DNA transcription and cell transformation in Hepatitis C genome mutation.

## **TEACHING**

### **LECTURES AND PRESENTATIONS**

#### **NATIONAL CONFERENCE**

- 05/4/18      **Speaker**  
 Pediatric Academic Societies Conference, Toronto, ON, Canada
- Differences of Sexual Development (DSD) Specialty Interest Group
  - “Testicular Regression Syndrome: Practice Variation in Diagnosis and Management”

#### **REGIONAL**

- 5/13/19      **Speaker, Oral Presentation**  
 NCH Pediatric Fellows Day, Columbus, OH
- “Adrenocorticotrophic hormone stimulates vascular endothelial growth factor release in healthy children and adolescents”
- 10/04/18      **Speaker, Oral Presentation**  
 Midwest Society of Pediatric Research, Detroit, MI
- “Adrenocorticotrophic hormone stimulates vascular endothelial growth factor release in healthy children and adolescents”
- 10/21/2017      **Invited Speaker**  
 OhioHealth Primary Care Conference, Columbus, OH
- “Type 2 Diabetes Mellitus and Pre-diabetes in Children and Adolescents”

#### **INSTITUTIONAL**

- 07/2016 – 06/2019      **Presenter**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Weekly Endocrinology case conferences, during inpatient service months
  - Present an interesting case to Endocrinology faculty and fellows for discussion.

- 07/2016 – 06/2019      **Presenter**  
 Nationwide Children’s Hospital, Columbus, OH
- Weekly teaching sessions for pediatrics residents and medical students on the Endocrinology service, during inpatient service months.
  - Present a Pediatric Endocrinology topic (topics included: Diabetes/DKA management, Growth and Puberty, Hypoglycemia, Calcium Homeostasis, Adrenal Insufficiency and Steroids, and Hypopituitarism).
- 4/12/2019      **Lecturer**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Diabetes Conference
  - Cystic Fibrosis-Related Diabetes: Updates to the 2014 ISPAD Guidelines
- 2/22/2019      **Presenter**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Journal Club
  - Article: “Bilateral Adrenalectomy in Congenital Adrenal Hyperplasia: A Systematic Review and Meta-Analysis”
- 2/15/2019      **Lecturer**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Fellowship Case Conference
  - “Septo-Optic Dysplasia and Panhypopituitarism”
- 10/19/2018      **Lecturer**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Fellowship Case Conference
  - “Premature Adrenarche: Causes of Early Pubarche and Virilization”
- 1/26/2018      **Lecturer**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Fellowship Case Conference
  - “Other Syndromes with Endocrinopathies: A 4 Mini-Case Series”
- 10/27/2017      **Lecturer**  
 Nationwide Children’s Hospital, Prader-Willi Syndrome Clinic, Columbus, OH
- Prader-Willi Clinic Conference
  - “Hypothyroidism, Hypogonadism, and Bone Health in Prader-Willi Syndrome”
- 8/25/2017      **Lecturer**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Fellowship Case Conference
  - “Endocrinopathies in Prader-Willi Syndrome”
- 6/23/2017      **Lecturer**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Fellowship Case Conference
  - “Bigger is \*Not\* Better: An Update on Type 2 Diabetes in Children”
- 3/24/2107      **Presenter**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Endo-Genetics Case Conference
  - “Possible Kearns-Sayre Syndrome in an Infant with Autoimmune Thyroiditis”
- 3/17/2017      **Presenter**  
 Nationwide Children’s Hospital, Division of Endocrinology, Columbus, OH
- Journal Club
  - Article: “ACTH protects against glucocorticoid-induced osteonecrosis of bone”

8/26/2016

**Lecturer**

Nationwide Children's Hospital, Division of Endocrinology, Columbus, OH

- Fellowship Case Conference
- "Review of Hyperthyroidism"

11/13/2015

**Presenter**

Nationwide Children's Hospital, Department of Pediatrics, Columbus, OH

- Morbidity and Mortality Conference
- "Missed diagnosis of hypoglycemic seizures in a patient with an ALTE"

**MENTORSHIP**

10/2020 – present

Medical Student, Northeast Ohio Medical University (NEOMED), Akron, OH

Mentoring program for medical students interested in pediatrics, meet quarterly to offer advice and provide guidance in career planning, applying to residency

10/2017 – 06/2019

Pediatrics Resident, Nationwide Children's Hospital, Columbus, OH

Mentoring program for residents with fellows in their desired field, meet quarterly to offer advice and provide guidance in applying to fellowship.

08/2010 – 06/2012

Medical Students, The Ohio State University College of Medicine, Columbus, OH

Program for upper-level medical students to help mentor first and second year students.

**VOLUNTEER ACTIVITIES**

08/2014 – 07/2018

**Medical Staff**

Camp Hamwi, Central Ohio Diabetes Association, Danville, OH

Role: Administer insulin and calculate dosing for cabin of 8-10 children and adolescents with Type 1 diabetes, monitor camp events, and correct hypoglycemia overnight on night rounds. I also recruited and organized pediatric residents interested in attending camp.

11/2009 – 03/2013

**Basketball Coach and Golf Coach**

Columbus City Schools Special Olympics

Role: Taught fundamentals of the sport to a team of high school-aged special needs athletes, helped build confidence and taught teamwork.

**PROFESSIONAL MEMBERSHIP**

07/2016 – present

Pediatric Endocrine Society

07/2016 – present

Endocrine Society

07/2013 – present

American Academy of Pediatrics

07/2013 – present

American Medical Association

01/2019 – 01/2020

American Association of Clinical Endocrinologists