CURRICULUM VITAE

ANGELA SHIEH CZAJA, MD MSc PhD

I. PERSONAL HISTORY

Current Position: Associate Professor

Division of Critical Care, Department of Pediatrics

School of Medicine University of Colorado

Citizenship: USA

II. EDUCATION

Graduate Education

1993 - 1997 B.A. Biochemistry

Graduated Magna Cum Laude with honors in Biochemistry

Phi Beta Kappa

University of Pennsylvania Philadelphia, Pennsylvania

1997 - 2001 M.D.

University of Pennsylvania Philadelphia, Pennsylvania

2005 - 2007 M.S. Epidemiology

University of Washington Seattle, Washington

2010 – 2019 Ph.D. Pharmaceutical Outcomes Research

School of Pharmacy University of Colorado

Aurora, CO

Postgraduate Education

2001 - 2004 Pediatric Residency Program

Children's Hospital of Philadelphia/University of Pennsylvania

Philadelphia, Pennsylvania

2004 - 2007 Pediatric Critical Care Fellowship

Seattle Children's Hospital/University of Washington

Seattle, Washington

Career Development Programs (competitive)

2008 – 2010 Clinical Faculty Scholars Program

University of Colorado

Aurora, Colorado

2015 – 2017 Teaching Scholars Program

University of Colorado Aurora, Colorado

2021 – 2022 LEAD (Leadership in Educational Academic Development) program

Association of Pediatric Program Directors (APPD)

III. ACADEMIC APPOINTMENTS

Full-time Faculty Positions

2014 – present Associate Professor

Department of Pediatrics, School of Medicine

University of Colorado Aurora, Colorado

2007 – 2014 Assistant Professor

Department of Pediatrics, School of Medicine

University of Colorado Aurora, Colorado

Other Faculty Positions

2017 – 2018 Special Faculty Appointment

Clinical Sciences. Graduate School

University of Colorado Aurora, Colorado

IV. OTHER PROFESSIONAL POSITIONS

1991 -1995 Research Assistant (summers only)

Department of Neurovirology (Dr. Donald Gilden) University of Colorado Health Sciences Center

Denver, Colorado

1993 - 1997 Research Assistant (part-time, academic year only)

Department of Development Neurology (Dr. Peter Bannerman) Children's Hospital of Philadelphia/University of Pennsylvania

Philadelphia, Pennsylvania

1996 Summer Undergraduate Research Fellow

Department of Neuroimmunology (Dr. Vanda Lennon)

Mayo Clinic

Rochester, Minnesota

2000 Research Assistant (summer)

Department of Infectious Disease (Dr. Stuart Isaacs)

University of Pennsylvania

Philadelphia, Pennsylvania

2016 – current Special Government Employee

Center for Drug Evaluation and Research

U.S. Food and Drug Administration

U.S. Department of Health and Human Services

V. HONORS AND AWARDS

1997 Phi Beta Kappa

2004 Anne Dyson Community Pediatrics Training Initiative Award for

Excellences in Community Pediatrics

2014 American Thoracic Society Innovation in Fellowship Education Award

Czaja AS, Carpenter TC, Grayck EN (University of Colorado)

"Addressing Entrustable Professional Activities through a Novel ARDS

Curriculum"

VI. PROFESSIONAL ORGANIZATION MEMBERSHIPS

2004 – present Society of Critical Care Medicine

Section of Pediatric Critical Care, member

2007 - present American Academy of Pediatrics

2007 - present Pediatric Acute Lung and Sepsis Investigators

2011 – present International Society of Pharmaco-epidemiology

Secretary (2011 – 2013) and Member, Pediatric Special Interest Group

2014 – present Educators in Pediatric Intensive Care (E.P.I.C) investigators, collaborator

and leader of educational scholarship projects

VII. MAJOR COMMITTEE AND SERVICE RESPONSIBILITIES

National

2013 – 2019 PREP ICU Editorial Board, American Academy of Pediatrics

Developed scholarly, case-based, peer-reviewed questions and critiques, based on evidence for high-stakes examination preparation and continuous professional development for the American Academy of

Pediatrics

2013 PICU Flow Whole System Measure (WSM) Development Working Group

Children's Hospital Association

2014 – present Pediatric Critical Care Fellowship Program Directors' Committee

Society of Critical Care Medicine

2016 Joint Meeting of the Anesthetic and Analgesic Drug Products Advisory

	Committee, the Drug Safety and Risk Management Advisory Committee, and the Pediatric Advisory Committee meeting (ad hoc Member) U.S. Food and Drug Administration
2017	Admission and Discharge for the Pediatric ICU Levels of Care Guidelines Development (panel voting member) Society of Critical Care Medicine
2017 – 2018	Task Force to revise the content specifications of the American Board of Pediatrics Subboard of Pediatric Critical Care Medicine American Board of Pediatrics
2018 – present	Advisory Board – physician VPS, LLC
2018 – 2021	Consultant/Special Government Employee Pediatric Advisory Committee U.S. Food and Drug Administration
2018 – present	Steering Committee, critical care representative Subspecialty Pediatric Investigator Network, Council of Pediatric Subspecialties
2020 - present	Pediatric Critical Care representative Council on Pediatric Subspecialties (CoPS)
2020	PREP ICU Deputy Editor, American Academy of Pediatrics
2021 – present	Member, Pediatric Advisory Committee U.S. Food and Drug Administration
Institutional	
2018 – 2019	Curriculum Reform, University of Colorado School of Medicine Assessment Implementation Subcommittee Team – member
2020 – present	Graduate Medical Education Committee Clinical Learning Environment Subcommittee, University of Colorado School of Medicine - member
Departmental	
2008 – 2014	Faculty Interviewer for Pediatric Residency Program (annually)
2021 – present	Diversity & Inclusion Committee – Education Subcommittee Department of Pediatrics, University of Colorado School of Medicine
2021 - present	Promotions Committee - member Department of Pediatrics, University of Colorado School of Medicine

2021 – present	Mid-career Faculty Working Group – member Academic and Faculty Affairs Department of Pediatrics, University of Colorado School of Medicine
Hospital	
2005 – 2007	PICU Quality and Patient Safety Committee, Seattle Children's Hospital
2008 – present	VPS database, physician lead Children's Hospital Colorado
2009 – present	PICU Quality and Patient Safety Committee Children's Hospital Colorado
2011 – present	Pediatric Critical Care Research Scientific Advisory Committee Children's Hospital Colorado
2012 – present	PICU Morbidity and Mortality Committee Children's Hospital Colorado
2014 – present	PICU Steering Committee Children's Hospital Colorado
2014 – present	Committee on Fellowship Education Children's Hospital Colorado,

Pharmacy and Therapeutics Committee

Children's Hospital Colorado

Department of Pediatrics, University of Colorado School of Medicine

VIII. LICENSURE AND BOARD CERTIFICATION

Medical Licensure

2017 - 2021

2001 – 2003	Pennsylvania (Training License)
2003 – 2004	Pennsylvania
2004 – 2007	Washington (Training License)
2007 – present	Colorado

Board Certification

2004 – present	American Board of Pediatrics
2008 – present	American Board of Pediatrics Subspecialty Boards, Critical Care Medicine

IX. REVIEW AND REFEREE WORK

Grant Reviewer

2012 Reviewer for the CCTSI Child and Maternal Health Pilot Grant Program
2013 Reviewer for ZonMw – The Netherlands organisation for health research

and development

Manuscript Reviewer (ad hoc)

Pediatrics

Archives of Pediatric and Adolescent Medicine (JAMA Pediatrics)

JAMA

Journal of Pediatrics

Pediatric Critical Care Medicine

Journal of Pediatric Infectious Diseases Society

European Journal of Pediatrics

BMC Pediatrics

European Journal of Clinical Pharmacology

Frontiers Pediatrics

Canadian Medical Association Journal

Pharmacoepidemiology and Drug Safety

X. INVITED LECTURES & PRESENTATIONS

Local

- 1. "Stress and PTSD: The costs of caring" for the "Good Grief at Noon" series presented by the Children's Hospital Colorado Bereavement Council. (2012)
- 2. "ARDS in the Post-Trauma Patient" for the Multi-disciplinary Trauma Lecture Series presented by the Children's Hospital Trauma Committee. (2014)
- 3. "Ventilator-Associated Lung Injury: Implications for Mechanical Ventilation" Pulmonary Grand Rounds, Dept of Pediatrics, University of Colorado School of Medicine (August 2019)

National

"Ensuring Safe and Effective Medications for Children:
 The Role of Pharmacoepidemiology" – guest faculty CME lecturer at annual American Academy Pediatrics PROS (Pediatric Research in Office Settings) Chapter Coordinator meeting (2018)

International

 Lasky T, Sobel R, Artaman A, Czaja AS, Maruti S, Osokogu OU, Verhamme KMC. "Pediatric Special Interest Group Needs Assessment" presented at the International Society of Pharmacoepidemiology Mid-Year meeting in Rotterdam, The Netherlands, April 2014.

XI. TEACHING RECORD

Major Teaching Activities – Students, Residents and Fellows

2004 – 2007	Monthly PICU resident lectures, Seattle Children's Hospital
2007 – present	PICU fellow educational conferences, Children's Hospital Colorado Selected Topics: Traumatic Brain Injury, Brain Death and Organ Donation, Mechanical Ventilation, Off-label Medication Use, Disseminated Intravascular Coagulation
2013 – 2015	Monthly PICU resident lectures, Children's Hospital Colorado
2018 - present	Facilitator/Leader – Curriculum Development Workshop Medical Education Elective for Residents and Fellows School of Medicine, University of Colorado

Major presentations – Other Learners

2018 – 2020	Teaching Scholars' Program Academy of Medical Educators, Univ of Colorado School of Medicine "Charting your Destination"
2018 - current	Teaching Scholars' Program Academy of Medical Educators, Univ of Colorado School of Medicine "Competency-Based Medical Education" workshop

Attending Service Duties

2007 – present	Supervision and bedside teaching of medical students, residents,
•	fellows and mid-level practitioners, PICU

Teaching Leadership and Administrative Duties

2012 – 2017	Director, Evidence-based Medicine curriculum for PICU fellows University of Colorado School of Medicine
2013 – 2017	Associate program director, Pediatric Critical Care Medicine Fellowship University of Colorado School of Medicine
2012 – present	Pediatric Critical Care Medicine Fellowship Curriculum Committee University of Colorado School of Medicine
2012 – present	Co-director, PCCM Clinical Research fellows' curriculum University of Colorado School of Medicine
2014 – present	Co-director, Pediatric Intensive Care Unit sub-internship elective University of Colorado School of Medicine

2017 – present	Program Director, Pediatric Critical Care Medicine Fellowship University of Colorado School of Medicine
2017 – 2019	Associate Program Director Pediatric Surgical Critical Care Medicine Fellowship University of Colorado School of Medicine
2017 – 2018	Committee Chair Master's of Clinical Science research committee (Borque) Clinical Sciences Program University of Colorado, Graduate School

Curriculum Development

2012 – 2017	Development of Evidence-based Medicine curriculum for PICU fellows
2013 –2014	Development of PICU Resident monthly curriculum
2013 – 2014	Development of a novel ARDS curriculum using the Entrustable Professional Activities framework
2014 - present	Development of Clinical Research Training for PICU fellows
2018	PICU sub-internship curriculum – PICU passport University of Colorado School of Medicine

Educational Scholarship

2017 – current	Point-of-Care Ultrasound training for PICU fellows Role: Mentor (Ryan Good, MD)
2017 – current	Leadership Assessment Tool for PICU fellows (EPIC project) Role: Co-leader
2017 – 2019	Faculty Development in Teaching within Pediatric Critical Care (EPIC project) Role: Collaborator
2018 – current	Use of Entrustrable Professional Activities in Pediatric Subspecialty Fellowships (multiple SPIN projects) Role: Critical Care Representative on Steering Committee, Collaborator

Other Teaching Activities

2015	Small group facilitator, pulmonary block School of Medicine, University of Colorado
2015	Small group facilitator on professionalism Committee on Fellowship Education, Department of Pediatrics School of Medicine, University of Colorado

2015	Physician Assistant Student Disability Curriculum – Expert Panel "How to deliver difficult news"
2017	Small group facilitator on scientific writing Committee on Fellowship Education, Department of Pediatrics School of Medicine, University of Colorado
2018	Invited "Stump the Professor" morning report Pediatrics Residency Program, Department of Pediatrics School of Medicine, University of Colorado
2018	Faculty judge Mentored Scholarly Activity (MSA) Capstone Presentations School of Medicine, University of Colorado
2018	Simulation Debriefing Faculty Facilitator Critical Care and Procedures 4 th year Medical Student Elective School of Medicine, University of Colorado
2019	Small group facilitator, Integrated Clinician Courses (ICC) Mechanical Ventilation School of Medicine, University of Colorado
2019 - 2020	Faculty judge (annual) Education Scholarship and Innovation Symposium Academy of Medical Educators School of Medicine, University of Colorado

XII. GRANT SUPPORT

Current Research Grants:

None

Prior Research Grants

Title: "Development of a prediction model for the risk of readmission to the pediatric

intensive care unit during the same hospitalization"

Laura P. & Leland K. Whittier Foundation

Virtual PICU Fellowship

2009 – 2011 \$72,500 Effort: 15%

Principal Investigator: Angela S. Czaja

Title: "Evaluation of Readmissions to the Pediatric Intensive Care Unit during a Single

Hospitalization"

Children's Hospital Colorado Research Institute

Quality Improvement Grant

2010 - 2011 \$5000 Principal Investigator: Angela S. Czaja

Title: "Genetic Epidemiology of Life-threatening Influenza Infections in Children and

Young Adults"

CDC/America's Health Insurance Plans Contract No. 200-2002-00732

10/01/2008 – 09/19/2012

\$834,340; Per-subject enrolled

Principal Investigator: Adrienne Randolph, MD MSC, The Children's Hospital

(Boston) Role: Site PI

Title: "Novel Influenza A (H1N1) Surveillance Registry"

NIH NHLBI Contract No. HHSN 268200536179C

11/09/2009 – 08/31/2010 \$560,627; Per-subject enrolled

Principal Investigators: Adrienne Randolph, MD MSc, The Children's Hospital,

Boston; Todd Rice, MD MSc, Vanderbilt University School of Medicine; B.

Taylor Thompson, MD, Massachusetts General Hospital

Role: Site PI

Title: "Physician Decision Making in Antidepressant Prescribing

CCTSI & Children's Hospital of Colorado Child & Maternal Health Pilot Grant

Child & Maternal Health Pilot Gra

5/10/2012 – 5/10/2014

\$20,000 Effort: 1.5%

Principle Investigator: Czaja

Title: "Multicenter Trial of Work-hour Limits for PGY 2 & 3 resident works hours on

patient safety"

NIH NHLBI U01 HL111478-01A1

09/01/2012 - 08/31/2017

\$1.304.354

Effort: 10% for 2 months for Y1, 10% for Y2 & Y3

Principal Investigator: Charles A. Czeisler (Harvard University)

Role: Co-investigator

Title: "Pediatric Trials Network"

American Academy of Pediatrics contract to University of Colorado

(original funding source - contract number from NIH HHSN275201000003I)

10/1/2017 - 10/28/2018

\$21,492

Effort: 0.6 Calendar months

Principal Investigator: Angela S. Czaja

Title: "Effectiveness of a Multimodal Curriculum on Improving Pediatric Resident

Competency in the Guideline-Based Management of Pediatric Severe Sepsis"

Western Region Association of Pediatric Program Directors

Medical Education Trainee Research Grant

2019-2020

Principal Investigator: Ryan Fredericks (PCCM fellow) Role: Primary Research Mentor, Program Director

XIII. BIBLIOGRAPHY

Peer-reviewed Publications (*indicates trainee at the time of project):

- 1. Bannerman PG, Oliver TM, Xu Z, **Shieh A**, and Pleasure DE. Effects of FGF-1 and FGF-2 on GD3 immunoreactive spinal neuroepithelial cells. *J Neuroscience Research* 1996, 45(5): 549 557.
- 2. Bannerman PG, Puhalla S, Saha A, **Shieh A**, Berman M and Pleasure DE. Glial growth factor-2 promotes the survival, migration and bromodeoxyuridine incorporation of mammalian neural crest cells in caudal neural tube explants cultures. *Developmental Brain Research* 2000, 124: 93-99.
- 3. **Shieh-Czaja A**, Calello DP and Osterhoudt KC. Sick sisters. *Pediatr Emerg Care* 2005, 21(6):400 -402.
- Czaja AS. A critical appraisal of a randomized controlled trial: Willson et al. Effect of Exogenous Surfactant (Calfactant) in Pediatric Acute Lung Injury, JAMA 2005, 293: 470-476. Pediatric Critical Care Medicine 2007, 8(1):50-503
- 5. Marciniak KE, Thomas IH, Brogan TV, Roberts JS, **Czaja A** and Mazor SS. Massive Ibuprofen overdose requiring extracorporeal membrane oxygenation for cardiovascular support: a case report. *Pediatric Critical Care Medicine* 2007, 8(2):180-182.
- 6. **Czaja AS**, Rivara FP, Wang J, Koepsell T, Nathens AB, Jurkovich GJ and Mackenzie E. Late outcomes of trauma patients with infections during index hospitalization. *J Trauma* 2009, 67(4):805-814.
- 7. **Czaja AS**, Zimmerman JJ and Nathens AB. Readmission and late mortality after pediatric severe sepsis. *Pediatrics* 2009, 123(3):849-857.
- 8. **Czaja AS** and Zimmerman JJ. The use of dexmedetomidine in critically ill children. *Pediatric Critical Care Medicine* 2009, 10(3):381-386.
- 9. **Czaja AS**, Scanlon MC, Kuhn EM and Jeffries HE. Performance of the Pediatric Index of Mortality 2 for pediatric cardiac surgery patients. *Pediatric Critical Care Medicine* 2011, 12(2): 184- 189.
- 10. Teng SN*, Kaufman J, **Czaja AS**, Friesen RH and daCruz EM. Propofol as a bridge to extubation for high-risk children with congenital cardiac disease. *Cardiol Young* 2011, 21(1):46-51.
- 11. Teng S*, Kaufman J, Pan Z, **Czaja A**, Shockley H and daCruz E. Continuous arterial pressure waveform monitoring in pediatric cardiac transplant, cardiomyopathy and pulmonary hypertension. *Intensive Care Med* 2011, 37(8):1297-1301.

- 12. **Czaja AS**, Moss M and Mealer M. Symptoms of Posttraumatic Stress Disorder among pediatric acute care nurses. *J Pediatric Nursing* 2012, 27:357-365.
- 13. **Czaja AS** and Valuck RJ. Off-label antidepressant use in children and adolescents compared to young adults: Extent and level of evidence. *Pharmacoepidemiology and Drug Safety* 2012, 21(9): 997-1004.
- 14. **Czaja AS**, Valuck RV and Anderson HG. Comparative safety of selective serotonin reuptake inhibitors among pediatric users with respect to adverse cardiac events. *Pharmacoepidemiology and Drug Safety* 2013, 22(6): 607-614.
- 15. **Czaja AS**, Hosokawa PW and Henderson WG. Unscheduled readmissions to the Pediatric Intensive Care Unit: Epidemiology, risk factors and variation among centers. *Pediatric Critical Care Medicine* 2013, 14(6): 571-579.
- 16. Bernard A* and **Czaja AS.** Pediatric intensive care readmissions: A single-center's experience. *Journal of Critical Care* 2013, 28(5): 625-633.
- 17. Llamado R*, **Czaja AS**, Stence N and Davidson J*. Continuous octreotide infusion for sulfonylurea-induced hypoglycemia in a toddler. *J Emergency Medicine*, in press. doi: 10.1016/j.jemermed.2013.05.016
- 18. Ross EL, Heizer J, Mixon MA, Jorgenson J, Valdez C, **Czaja AS**, Reiter PD. Evaluation of evidence and recommendations for obesity dosing of commonly prescribed medications in critically ill children. *Am J Health Syst Pharm* 2015, 72(7):542-56.
- 19. **Czaja AS**, Reiter PD and Valuck RJ. Patterns of off-label prescribing in the pediatric intensive care unit and prioritizing future research. *J Pediatr Pharmacol Ther* 2015, 20(3): 186-96.
- 20. Lasky T, Artaman A, **Czaja AS**, Maruti SS, Osokogu OU, and Sobel RE. Current needs in pediatric pharmacoepidemiology. *Pharmacoepidemiology and Drug Safety*, 2016. 25(6):738-42.
- 21. Czaja AS, Fiks AG, Wasserman RC and Valuck RJ. Beyond the label: steering the focus towards safe and effective prescribing. *Pediatrics* 2017, 139 (5) e20163518.
- 22. Leroue MK*; Good RJ*, Skillman HE, **Czaja AS.** Enteral Feeding Practices in Critically III Children Requiring Non-Invasive Positive Pressure Ventilation. *Pediatr Crit Care Med* 2017, 18(12): 1093-1098.
- 23. Stockwell DC, Thomas C, Fieldston ES, Hall M, **Czaja AS**, Stalets EL, Biehler J, Sheehan M, Foglia D, Byrd S, McClead RE. Using length of stay to understand patient flow for acute and critically ill pediatric hospitalized patients. *Pediatric Quality and Safety* 2017, 3(1):e050. eCollection 2018 Jan-Feb.
- 24. Alvarez RV*, Palmer C, **Czaja AS**, Peyton C, Silver G, Traube C, Mourani PM, Kaufman J. Delirium is a common and early finding in the pediatric cardiac ICU. *J Pediatr* 2018, 195:206-212.

- 25. Good RH*, Leroue MK, **Czaja AS.** Accuracy of Administrative Codes for Distinguishing NIPPV from HHFNC in Critically III Children. *Hospital Peds* 2018, 8(7): 426-429.
- 26. **Czaja AS**, Ross ME, Liu W, Fiks AG, Localio R, Wasserman RC, Grundmeier RW, Adams WG. Electronic health record (EHR) based post-marketing surveillance of adverse events associated with pediatric off-label medication use: a case study of short-acting beta-2-agonists and arrhythmias. *Pharmacoepi Drug Safety* 2018, 27:815-822.
- 27. James, KA, Gralla J, Ridall LA*, Do TN, **Czaja AS**, Mourani PM, Ciafaloni E, Cunniff C, Donnelly J, Oleszek J, Pandya S, Price E, Yang M, Auerbach S. Left ventricular dysfunction in Duchenne and Becker Muscular Dystrophies. *Cardiology Young* 2020, 30(2): 171 176.
- 28. Bone MF, Mink R, Marcdante K, **Czaja AS**, Storgion SA, Turner DA. Expanding faculty development of teaching skills: a national needs assessment of Pediatric Critical Care Medicine faculty. *Pediatr Crit Care Med* 2020, 21(5):486 493.
- 29. Turner DA, Boyer D, Dwyer A, **Czaja AS**, Odetola FO, Schuette J, Wheeler D, Winkler M, Goodman DM. Establishing the knowledge and skills necessary in Pediatric Critical Care Medicine: A systematic approach to practice analysis. *Pediatr Crit Care Med* 2020, 21(7): 667 671.
- 30.Lasky T, Carleton B, Horton DB, Kelly LE, Bennett D, **Czaja AS**, Gifkins D, Osokogu OU, McMahon AW. Real-world evidence to assess medication safety and effectiveness in children: A systematic review. *Drugs Real World Outcomes* 2020, 7(2): 97 107.
- 31. **Czaja AS**, Collins K, Valuck RJ, Anderson HD, Ghosh D, Davidson JA. Validation of administrative claims-based algorithms for ventricular arrhythmias and cardiac arrest in the pediatric population. *Pharmacoepidemiol Drug Safety* 2020, 29(11): 1499 1503.
- 32. Good RH, Levin M, Feder S, Loi MM, Kim JS, Branchford BR, **Czaja AS**, Carpenter TC. Accuracy of Bedside Ultrasound Femoral Vein Diameter Measurement by Pediatric Intensive Care Unit Providers. *Pediatr Crit Care Med* 2020, 21(12):e1148-e1151.
- 33. **Czaja AS**, Anderson HD, Ghosh D, Davidson J, Campbell JD, Valuck RJ. Increased odds of ventricular arrhythmias associated with selective serotonin reuptake inhibitor use among pediatric and young adult population: a case-control study. *J Peds* 2020, in press
- 34. O'Keefe S*, Maddux AB, Bennett KS, Youngwerth J, **Czaja AS**. Variation in pediatric palliative care allocation among critically ill children in the United States. *Pediatr Crit Care Med* 2020, in press
- 35. O'Keefe S*, **Czaja AS.** Validation of Administrative Codes for Palliative Care Consultation among Critically III Children. *Hospital Peds* 2021; 11(2):179-182.

- 36. Awadallah NS, **Czaja AS**, Fainstad T, McNulty MC, Jaiswal KR, Jones TS, Rumack CM. The Impact of the COVID-19 Pandemic on Family Medicine Residency Training. *Family Medicine* 2021, in press.
- 37. Good RJ, Zurca AD, Turner DA, Bjorklund AR, Boyer DL, Krennerich E, Petrillo T, Rozenfeld RA, Sasser WC, Schuette J, Tcharmtchi MH, Watson C, **Czaja AS**; for the Education in Pediatric Intensive Care (E.P.I.C) Investigators. Transport Medical Control Education for Pediatric Critical Care Fellows: A National Needs Assessment Study. *Pediatr Crit Care Med* 2021, in press.

Book Chapters

- Contributing author for chapter on Critical Care. In: Current Diagnosis and Treatment: Pediatrics. Hay Jr WW, Levin MJ, Sondheimer JM, Deterding RR, eds. McGraw Hill companies, USA, 20th (2010), 21st (2012), 22nd (2014), 23rd (2016), 24th (2018) editions.
- 2. Lead author for chapter on Critical Care. In: *Current Diagnosis and Treatment: Pediatrics*. Hay Jr WW, Levin MJ, Sondheimer JM, Deterding RR, eds. McGraw Hill companies, USA, 25th (2020), 26th (2022) editions.

Invited Non-Peer-Reviewed Publications

- 1. **Czaja AS.** Off-Label Antidepressant Use in Children and Adolescents. *Pediatrics for Parents* 2012, 28(9&10):27-28.
- 2. **Czaja AS**, Henderson WG. In reply to: Are readmissions to PICU preventable or is this the nature of the beast? [Letter to the editor] *Pediatr Crit Care Med* 2014, 15(1): 92-3.
- 3. **Czaja AS.** Children are not just little adults... [Invited editorial] *Pediatr Crit Care Med* 2016, 17(2):178-80.

Other Invited Scholarly Products

 Society of Critical Care Medicine iCritical Care podcast discussing publication on "Unscheduled readmission to the Pediatric Intensive Care Unit: Epidemiology, risk factors and variation among centers" (*Pediatric Critical Care Medicine*, 2013), 2013, SCCM Pod-219 PCCM

Scientific Abstracts and Presentations (*indicates trainee at the time of project)

Competitive

- 1. **Czaja AS** and Zimmerman JJ. Endpoints/Treatment algorithms for randomized controlled trials of steroids in pediatric sepsis. *Poster presentation* at the Society of Critical Care Medicine's 34th Critical Care Congress, January 2005.
- 2. **Czaja AS**, Zimmerman JJ and Nathens AB. Readmission and late mortality after pediatric severe sepsis. *Platform presentation* at the annual meeting of the Pediatric Academic Societies, May 2006.

- 3. Teng S*, Kaufman J, Pan Z, **Czaja AS**, Shockley H and da Cruz E. Continuous arterial pressure waveform monitoring in pediatric cardiac transplant, cardiomyopathy, and pulmonary hypertension patients. *Poster presentation* at the CHOP Cardiology Conference, February 2010.
- 4. Teng SN*, Kaufman J, **Czaja AS**, Friesen RH, and da Cruz EM. Propofol as a bridge to extubation for high risk children with congenital heart disease. *Oral presentation* at the Western Society of Pediatric Cardiology, May 2009.
- 5. Bernard A* and **Czaja AS**. Readmission to the pediatric intensive care unit within a single hospitalization. *Poster presentation* at the Society of Critical Care Medicine's 39th Critical Care Congress, January 2010.
- 6. **Czaja AS**, Hosokawa P and Henderson W. Risk factors for early unplanned readmission to the pediatric intensive care unit. *Poster presentation* at the annual American Thoracic Society (ATS) International Conference, May 2011.
- 7. **Czaja AS** and Valuck RJ. Off-label antidepressant use in children, adolescents and young adults. *Poster presentation* at the annual Epidemiologic Exchange, School of Public Health at the University of Colorado, April 2011.
- 8. Bagdure D*, Wathen B, **Czaja A**, Bajaj L and Dobyns E. Identify the barriers in implementation of pediatric sepsis guidelines in a tertiary children's hospital. *Poster presentation* at the annual meeting of the Pediatric Academic Societies, May 2011.
- 9. **Czaja AS** and Valuck RJ. Off-label antidepressant use in children, adolescents and young adults. *Poster presentation* at the 27th International Conference on Pharmacoepidemiology & Therapeutic risk Management (ICPE), August 2011.
- 10. Skillman HE, Bechard LJ, **Czaja AS**, Mourani PM and Mehta N. Quality improvement strategies can improve nutrient delivery in mechanically ventilated children: single center results from the Pediatric International Nutrition Study 2009 and 2011. *Poster presentation* at the Clinical Nutrition Week, Orlando, FL, January 2012.
- 11. **Czaja AS**, Reiter P and Valuck RJ. Off-label prescribing in the pediatric intensive care unit (PICU): Prioritizing future research. *Poster presentation* at the Pediatric Academic Societies' Annual Meeting in Washington, DC, May 4-7, 2013.
- 12. Ridall LA*, Gralla J, Mourani PM, **Czaja AS**, Yang M, Oleszek J, Cunniff C, Donnelly J, Ciafaloni E, Price E, Pandya S and Auerbach SR. Progression of left ventricular dysfunction in Duchenne and Becker muscular dystrophies. *Oral presentation* at the American College of Cardiology 63rd Annual Scientific Session in Washington, DC, March 29-31, 2014, and *poster presentation* at the Pediatric Academic Societies' Annual Meeting in Vancouver, Canada, May 2014.
- 13. Jackson BJ*, Mourani PM, Glover JJ, **Czaja AS.** Family meetings occur infrequently for PICU patients with prolonged length of stay. *Oral presentation* at the 2014 American Academy of Pediatrics (AAP) National Conference and Exhibition in San Diego, CA, October 11-14. Received the section best in-training abstract award.

- 14. **Czaja AS**, Liu W, Fiks A, Wasserman RC, McCarn B, Sills M, Ross ME, Valuck R, Adams WG. A New Collaborative Pediatric Electronic Health Record (EHR) Network to Examine Off-Label Prescribing. *Poster presentation* at the Pediatric Academic Societies' Annual Meeting in San Diego, CA, April 25-28, 2015.
- 15. Bone M, Marcdante K, Mink R, **Czaja AS**, Storgion S, Turner DA. Needs Assessment for Faculty Development of Pediatric Critical Care Medicine Educators. *Research Snapshot presentation* at the Society of Critical Care Medicine's 45th Critical Care Congress, February 2016.
- 16. Leroue MK*, Good RJ*, Skillman HE, **Czaja AS**. Provider attitudes and opinions on enteral nutrition for critically ill infants and children on non-invasive positive pressure ventilation. *Poster presentation* at the American Thoracic Society Annual Conference in San Francisco, CA, May 13-18.
- 17. Leroue MK*, Good RJ*, Skillman HE, **Czaja AS**. Enteral Feeding Practices in Critically III Children Requiring Non-Invasive Positive Pressure Ventilation. *Research Snapshot Presentation* at the Society of Critical Care Medicine's 46th Critical Care Congress, January 2017.
- 18. **Czaja AS**, Barker J, Baca M, Parker T. Clinical research training for pediatric subspecialty fellows: a needs assessment. *Poster presentation* at the Education Scholarship & Innovation Symposium, January 2017.
- 19. Skillman HE, Leroue MK*, Good RJ*, **Czaja AS.** Reported vs. Actual Feeding Practices in Critically III Children Requiring Non-Invasive Positive Pressure Ventilation. *Oral presentation* at Clinical Nutrition Week, American Society for Parenteral and Enteral Nutrition, February 2017.
- 20. O'Keefe S*, Maddux AB, Bennett KS, Youngwerth J, LaVelle J, Williams K, Czaja AS. Outcomes of Critically-III Pediatric Patients Identified by Palliative Care Screening Criteria. Poster presentation at Pediatric Academic Societies Annual Meeting in Toronto, Canada May 2018.
- 21. **Czaja AS**, Fiks A, Hornik C, Livingston C, Berrigan L, Song L, Steffes J, Bilker W, Grundmeier R (on behalf of the Best Pharmaceuticals for Children Act Pediatric Trials Network). Weight Gain and Metabolic Syndrome in Children Exposed to Second-Generation Antipsychotic Medications. *Poster presentation* at Pediatric Academic Societies Annual Meeting in Toronto, Canada May 2018.
- 22. Good R, Levin M, Loi M, Branchord B, **Czaja AS**, Carpenter TC. Accuracy of bedside ultrasounds femoral vein diameter measurement by PICU providers. *Research Snapshot Presentation* at the Society of Critical Care Medicine's 48th Critical Care Congress, February 2019.
- 23. O'Keefe S*, Maddux A, Bennett K, Youngwerth J, **Czaja AS.** Palliative care allocation among critically ill children is highly variable in the United States. *Research Snapshot Presentation* at the Society of Critical Care Medicine's 48th Critical Care Congress, February 2019.

- 24. **Czaja AS**, Anderson HG, Davidson J, Valuck RJ. Risk of ventricular arrhythmia and cardiac arrest among children with mental health diagnoses. *Poster presentation* at Pediatric Academic Societies Annual Meeting in Baltimore, MD, April 2019.
- 25. Mink R, Carraccio C, Herman B, Hsu D, Chess P, High P, Langhan ML, McGann KA, Curran M, Stafford D, **Czaja AS**, Dammann CE, Mahan JD, Aye T, Schwartz A. Are Graduating Pediatric Fellows Meeting the Expected Level of Supervision for the Common Subspecialty Entrustable Professional Activities (EPAs)? *Oral presentation* at Pediatric Academic Societies Annual Meeting in Baltimore, MD April 2019.
- 26. Good RH, **Czaja AS.** Local Needs Assessment for Point-of-Care Ultrasound Training in Pediatric Critical Care Medicine Fellowship. University of Colorado Department of Pediatrics, Medical Education Retreat, 2019
- 27. Green M, Zurca A, **Czaja A**, Mink R, Maa T, Bone M, Werner J, McCabe M, Emke A, Siems A, Boyer D, Turner D. Development of a clinical leadership assessment tool for pediatric critical care fellows. Presented at the Society of Critical Care Medicine's 48th Critical Care Congress, February 2020.
- 28. Good RH, **Czaja AS.** Implementation of a Point-of-Care Ultrasound Curriculum for Pediatric Critical Care Medicine Fellows. *Accepted for* the 2020 Education Scholarship & Innovation Symposium, Academy of Medical Educators, University of Colorado School of Medicine. Meeting canceled due to COVID-19 concerns.
- 29. Mink R, Carracio C, Herman B, Weiss P, Turner D, Pitts S, Moffatt M, Kesselheim J, Czaja AS, Schwartz A. Relationship between level of supervision at the end of residency compared with early fellowship for the Entrustable Professional Activities (EPAs): a pilot study. Accepted for *platform presentation* at the Pediatric Academic Societies 2020 meeting, Philadelphia PA. Meeting canceled due to COVID-19 concerns. Disseminated on 4/30/20 on the PAS 2020 Meeting Program Guide, EPAS20202455.2.
- 38. Mink R, Carracio C, Herman B, Chess P, Dammann C, Hsu D, Kesselheim J, Moffatt M, Myers A, Turner D, **Czaja AS**, Schwartz A. Have level of supervision ratings for the common pediatric subspecialty Entrustable Professional Activities (EPAs) changed over time? Accepted for *poster presentation* at the Pediatric Academic Societies 2020 meeting, Philadelphia PA. Meeting canceled due to COVID-19 concerns. Disseminated on 4/30/20 on the PAS 2020 Meeting Program Guide, EPAS20202823.369.
- 39. Good RJ, Zurca AD, Turner DA, Bjorklund AR, Krennerich E, Petrillo T, Rozenfeld RA, Sasser WC, Schuette J, Tcharmtchi MH, Watson C, **Czaja AS**; for the Education in Pediatric Intensive Care (E.P.I.C) Investigators. Out of Sight: Transport Medical Control Education in Pediatric Critical Care Medicine Fellowship. Presented at the Society of Critical Care Medicine's 49th Critical Care Congress, February 2021.
- 40. Awadallah NS, Jones TS, Jaiswal KR, Fainstad T, Czaja AS Rumack CM. The CUSOM Resident & Fellow COVID-19 Experience: What Changes Should Stay? Accepted for poster presentation at 2021 Education Scholarship & Innovation Symposium, Academy of Medical Educators, University of Colorado School of Medicine, Mar 1-5, 2021.

- 41. Castaneda L*, Lockwood J, Wathen B, **Czaja AS.** Escalation of Care Outside of the Pediatric ICU: Educational Needs from a Multidisciplinary Perspective. Accepted for *poster presentation* at 2021 Education Scholarship & Innovation Symposium, Academy of Medical Educators, University of Colorado School of Medicine, Mar 1-5, 2021.
- 42. Castaneda L*, **Czaja AS.** Socially-Distanced Learning: Perspectives on Instructor-Guided Virtual Simulation. Accepted for *poster presentation* at 2021 Education Scholarship & Innovation Symposium, Academy of Medical Educators, University of Colorado School of Medicine, Mar 1-5, 2021.
- 43. Langhan ML, Mink R, Curran M, Herman B, Stafford D, **Czaja** AS, Weiss P, Turner D, Myers A. How do Clinical Competency Committees determine level of supervision for the pediatric subspecialty Entrustable Professional Activities. Accepted for *poster presentation* at the 2021 Association of Pediatric Program Directors (APPD) virtual meeting.
- 44. Langhan ML, Curran M, **Czaja AS**, Herman B, Myers A, Stafford D, Turner DA, Weiss P, Mink R. Entrustment and Supervision: How clinical competency committees approach pediatric subspecialty entrustable professional activities. Accepted for *platform presentation* at the Pediatric Academic Societies 2021 virtual meeting.