# Daniel Tawfik, MD, MS

Curriculum Vitae Last updated 22 November 2021

#### BIOGRAPHICAL AND CONTACT INFORMATION

**Business Address** 770 Welch Road, Suite 435

Stanford, CA 94304

**Business Phone** (650) 723-9902

# EDUCATION AND TRAINING

**Undergraduate Education** 

Aug 2003-May 2007 Wheaton College Bachelor of Science

Wheaton, IL Biology, cum laude

**Graduate Education** 

Sept 2016-June 2018 Stanford University School of Medicine Master of Science, Health Research and

Stanford, CA Policy

Aug 2007-May 2011 University of Iowa Doctor of Medicine

Roy J. and Lucille A. Carver College of Medicine

Iowa City, IA

Postgraduate Training

July 2014-June 2017 Lucile Packard Children's Hospital at Pediatric Critical Care Medicine Fellowship

Stanford University

Stanford, CA

July 2011-June 2014 University of Utah Pediatric Internship and Residency

Primary Children's Hospital

Salt Lake City, UT

# CERTIFICATION AND LICENSURE

#### **Certifications**

American Heart Association Advanced Cardiovascular Life Support	2019-present
American College of Surgeons Advanced Trauma Life Support	2015-present
American Heart Association Pediatric Advanced Life Support	2011-present
American Heart Association Basic Life Support for Healthcare Providers	2008-present

# **Specialty Certifications**

American Board of Pediatrics, Pediatric Critical Care Medicine	2018-present
American Board of Pediatrics, Pediatrics	2014-present
United States Medical Licensing Examinations; Steps 1, 2, 3	2009, 2010, 2012

# Medical Licensure

State of California Medical License, License #A131001	2014-present
State of Utah Medical License, License #8415763-1205	2011-2016

# Memberships

Stanford Center for Artificial Intelligence in Medicine & Imaging	2021-present
Stanford Maternal and Child Health Research Institute	2018-present
Society for Pediatric Research	2016-present
Society of Critical Care Medicine	2015-present
American Academy of Pediatrics	2014-present
Gold Humanism Honor Society	2011-present

# APPOINTMENTS AND POSITIONS

July 2017-present	Stanford University School of Medicine  Division of Pediatric Critical Care Medicine, Department	Instructor ent of Pediatrics
July 2012-May 2014	University of Utah Department of Pediatrics	Resident Researcher
Jan 2010-June 2010	University of Iowa College of Medicine Patient-Centered Learning Curriculum	Co-Facilitator
Aug 2008-July 2009	University of Iowa College of Medicine Rubin Flocks Learning Community	Co-Mayor
May 2008-Sept 2008	University of Iowa College of Medicine	Medical Student Researcher

# HONORS AND AWARDS

HONORS AND AWARDS	
Highly Cited Author Award  Mayo Clinic Proceedings, Rochester, MN	2021
Outstanding Reviewer 2020  Annals of Internal Medicine, Philadelphia, PA	2021
Highly Cited Author Award  Mayo Clinic Proceedings, Rochester, MN	2020
Outstanding Research Poster Award Stanford University School of Medicine, Stanford, CA	2017
Global, Rural, and Underserved Child Health Certificate University of Utah School of Medicine, Salt Lake City, UT	2014
17th Annual Jack Emerson Award 31st Annual Conference on High-Frequency Ventilation of Infants, Children, and Adults, Snowbird, UT	2014
Community Leadership and Excellence Award University of Iowa Roy J. and Lucille A. Carver College of Medicine, Iowa City, IA	2010
Best Translational/Clinical Research Poster Award University of Iowa Children's Hospital, Iowa City, IA	2009

University of Iowa Roy J. and Lucille A. Carver College of Medicine, Iowa City, IA

#### SCHOLARLY PUBLICATIONS

#### Peer-reviewed journal articles (original research)

- 1. Su E, Hamilton CE, **Tawfik DS**, Mariano K, Ginsburg S, Conlon T, Veten A, Rernandez E, Carniero-Pla D, Wong KP, Haileselassie B. Laryngeal ultrasound detects vocal fold immobility in adults: a systematic review. *Journal of Ultrasound in Medicine*. In press.
- 2. Grunauer M, Mikesell C, Bustamante G, Cobo G, Sanchez S, Roman AM, Icaza-Freire AP, Gavilanes AWD, Wang NE, PICU-MIC Research Group\*. Pain assessment and management in pediatric intensive care units around the world, an international, multicenter study. *Frontiers in Pediatrics*. 2021; 9:746489. \*member of PICU-MIC Research Group.
- 3. **Tawfik DS\***, Itoga NK\*, Lee CK, Maruyama S, Leeper NJ, Chang TI. Simultaneous consideration of systolic and diastolic blood pressure and cardiovascular outcomes: Reanalysis of ALLHAT data. *JACC*. 2021; 78(17):1671-78. \*co-first authorship.
- 4. Sinha A, Stevens LA, Su F, Pageler N, **Tawfik DS**. Measuring electronic health record use in the pediatric ICU using audit-logs and screen recordings. *Applied Clinical Informatics*. 2021; 12:737-44.
- Tawfik DS, Sinha A, Bayati M, Adair KC, Shanafelt TD, Sexton JB, Profit J. Frustration with technology and its relation to emotional exhaustion among health care workers: Cross-sectional observational study. J Med Internet Res. 2021; 23(7):e26817.
- 6. Profit J, Adair KC, Cui X, Mitchell B, Brandon D, **Tawfik DS**, Rigdon J, Gould JB, Lee HC, Timpson WL, McCaffrey MJ, Davis AS, Pammi M, Matthews M, Stark AR, Papile L, Thomas E, Cotten M, Khan A, Sexton JB. Randomized controlled trial of the "WISER" intervention to reduce healthcare worker burnout. *Journal of Perinatology*. 2021; 41(9):2225-34.
- 7. **Tawfik DS**, Shanafelt TD, Dyrbye LN, Sinsky CA, West CP, Davis AS, Su F, Adair KC, Trockel M, Profit J, Sexton JB. Personal and professional factors associated with work-life integration among US physicians. *JAMA Network Open.* 2021; 4(5):e2111575.
- 8. Hamilton CE, Su E, **Tawfik DS**, Fernandez E, Veten A, Conlon T, Ginsburg S, Mariano K, Haileselassie B. Assessment of vocal cord motion using laryngeal ultrasound in children: A systematic review and meta-analysis. *Pediatric Critical Care Medicine*. 2021; 22(10):e532-39.
- 9. Haidari E, Main EK, Cui X, Cape V, **Tawfik DS**, Adair KC, Sexton JB, Profit J. Maternal and neonatal health care worker well-being and patient safety climate amid the COVID-19 pandemic. *Journal of Perinatology*. 2021; 41(5):961-69.
- 10. Bhargava V, **Tawfik DS**, Tan YJ, Dunbar T, Haileselassie B, Su E. Ultrasonographic optic nerve sheath diameter measurement to detect intracranial hypertension in children with neurologic injury: A systematic review. *Pediatric Critical Care Medicine*. 2020; 21(9):e858-68.
- 11. Lin JL, **Tawfik DS**, Gupta R, Imrie M, Bendavid E, Owens DK. Health and economic outcomes of posterior spinal fusion for children with neuromuscular scoliosis. *Hospital Pediatrics*. 2020; 10(3):257-65.
- 12. **Tawfik DS**, Profit J, Lake EL, Liu JB, Sanders LM, Phibbs CS. Development and use of an adjusted nurse staffing metric in the neonatal intensive care unit. *Health Services Research*. 2020; 55(2):190-200.
- 13. Profit J, Sharek PJ, Cui X, Kan P, Nisbet CC, Thomas EJ, **Tawfik DS**, Lee HC, Draper D, Sexton JB. The correlation between neonatal intensive care unit safety culture and quality of care. *Journal of Patient Safety*. 2020; 16(4):E310-16.
- 14. **Tawfik DS**, Thomas EJ, Vogus T, Liu JB, Sharek PJ, Nisbet CC, Sexton JB, Profit J. Safety climate, safety climate strength, and length of stay in the NICU. *BMC Health Services Research*. 2019; 19(1):738-48.

- 15. **Tawfik DS**, Profit J, Adair KC, Sexton JB, Trockel M, Shanafelt TD, Ioannidis JPA. Evidence relating healthcare provider burnout and quality of care: A systematic review and meta-analysis. *Annals of Internal Medicine*. 2019; 171(8):555-67.
- 16. **Tawfik DS**, Gould JB, Profit J. Perinatal Risk Factors and Outcome Coding in Clinical and Administrative Databases. *Pediatrics*. 2019; 143(2):e20181487.
- 17. **Tawfik DS\***, Itoga NK\*, Lee CK, Maruyama S, Leeper NJ, Chang TI. Association of blood pressure measurements with peripheral arterial disease events: A reanalysis of the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT) data. *Circulation*. 2018; 138:1805-14. \*co-first authorship.
- 18. **Tawfik DS**, Profit J, Morgenthaler TI, Satele DV, Sinsky CA, Dyrbye LN, Tutty MA, West CP, Shanafelt, TD. Physician burnout, well-being, and work unit safety grades in relationship to reported medical errors. *Mayo Clinic Proceedings*. 2018; 93(11): 1571-80.
- 19. Bhargava V, **Tawfik DS**, Niebuhr B, Jain SK. Transcutaneous bilirubin estimation in extremely low birth weight infants receiving phototherapy: A prospective observational study. *BMC Pediatrics*. 2018; 18(1):227.
- 20. **Tawfik DS**, Hobson WL. Group A Streptococcal Pyomyositis in a Previously Healthy Six-year-old Girl. *Cureus* 2018; 10(2): e2168.
- 21. Yecies D, **Tawfik DS**, Damman J, Thorson CM, Hong DS, Grant GA, Bensen R, Damian M. Near-fatal gastrointestinal hemorrhage in a child with medulloblastoma on high dose dexamethasone. *Cureus* 2017; 9(7): e1442.
- 22. **Tawfik DS**, Phibbs CS, Sexton JB, Kan P, Sharek PJ, Nisbet CC, Rigdon J, Trockel M, Profit J. Factors associated with provider burnout in the neonatal intensive care unit. *Pediatrics*. 2017; 139(5): e20164134.
- 23. Profit J, Sharek PJ, Kan P, Rigdon J, Desai M, Nisbet CC, **Tawfik DS**, Thomas EJ, Lee HC, Sexton JB. Teamwork in the NICU setting and its association with health care-associated infections in very low-birth-weight infants. *American Journal of Perinatology*. 2017; 34(10): 1032-40.
- 24. **Tawfik DS**, Sexton JB, Kan P, Sharek PJ, Nisbet CC, Rigdon J, Lee HC, Profit J. Burnout in the neonatal intensive care unit and its relation to healthcare-associated infections. *Journal of Perinatology.* 2017; 37(3): 315-20.
- 25. **Tawfik DS**, Bennett TD, Welch B, Poss WB. Use of high frequency ventilation in the pediatric intensive care unit. *Journal of Pediatric Intensive Care*. 2016; 5(1): 012-20.
- 26. Ansong D, **Tawfik DS**, Williams EA, Benson S, Nyanor I, Boakye I, Obirikorang C, Sallah L, Arhin B, Boaheng JM, Amuzu E, Asibey O, Dickerson T. Suboptimal vaccination rates in rural Ghana despite positive caregiver attitudes towards vaccination. *Journal of Vaccines & Immunization* 2014; 2(2): 7-15.
- 27. **Tawfik DS**, Cowan KR, Walsh AM, Hamilton WS, Goldman FD. Exogenous immunoglobulin downregulates T-cell receptor signaling and cytokine production. *Pediatric Allergy and Immunology* 2012; 23(1): 88-95.

#### Peer-reviewed publications (other)

- Ravi D, Tawfik DS, Sexton JB, Profit J. Changing safety culture. *Journal of Perinatology*. 2021; 41(10):2552-60.
- 2. **Tawfik DS**, Profit J. Provider burnout: Implications for our perinatal patients. *Seminars in Perinatology*. 2020; 44(4):e151243.
- 3. **Tawfik DS**, Profit J, Webber S, Shanafelt TD. Organizational factors affecting physician well-being. *Current Treatment Options in Pediatrics*. 2019; 5(1):11-25.
- 4. **Tawfik DS**, Sexton JB, Adair KC, Kaplan HC, Profit J. Culture and context in quality of care: Improving teamwork and resilience. *Clinics in Perinatology*. 2017; 44(3): 541-52.

#### Abstracts not published in other forms

- 1. Sinha A, Steffen KM, **Tawfik DS**. EHR usability and barriers to efficient information gathering on the EHR in the PICU: Current state. *CCM*. In press.
- 2. Goldman FD, Cowan KR, **Tawfik DS**, Hamilton WS, Westin E, Klingelhutz A. Transduction of hTR into hematopoietic stem cells increases telomerase activity. *Blood* 2008; 112: Abstract 4624.

## Manuscripts under review

- 1. McClafferty H, Hubbard D, Foradori D, Brown M, Profit J, **Tawfik DS**. AAP Physician health and wellness update. *Under review at Pediatrics*.
- 2. Sexton, JB, Adair KC, **Tawfik DS**, Profit J. Burnout before and during a global pandemic. *Under review at Annals of Internal Medicine*.
- 3. Adair KC, Palassof S, **Tawfik DS**, Profit J, Frankel A, Leonard M, Sexton JB. The local leadership scale of the SCORE survey: A metric to assess psychologically safe leadership in healthcare. *Under review at BMJ Quality and Safety*.
- 4. Ruiz RM, **Tawfik DS**, Lee HC, Burgis J, Mendoza J, Gallo A, Esquivel C, Jeng MR, Damian M. A retrospective evaluation of intraoperative thromboelastography during pediatric liver transplantation in a single center. *Under review at Anesthesia and Analgesia*.

#### **GRANTS**

## **Current Funding**

K08-HS027837 (PI: Tawfik)

Agency for Healthcare Research and Quality

9/30/2020 - 9/29/2025

Development and Validation of a Prediction Model to Address Physician Burnout

Instructor K Award Support Program (PI: Tawfik)

Stanford Maternal & Child Health Institute

9/30/2020 - 9/29/2022

Development and Validation of a Prediction Model to Address Physician Burnout

Jackson Vaughan Critical Care Research Award (PI: Sinha)

Jackson Vaughan Critical Care Research Fund

3/1/2020 - 6/30/2022

Measuring the Relation between Inpatient Electronic Health Record Experience and Provider Burnout

Role: Primary Mentor

#### **Prior Funding**

Pilot/Early Career Grant Program (PI: Tawfik)

Stanford Maternal & Child Health Research Institute

1/1/2018 - 12/31/2018

Development of an Adjusted Nurse Staffing Metric in the Neonatal Intensive Care Unit

Master's Degree Tuition Assistance Program (PI: Tawfik)

Stanford Maternal & Child Health Research Institute

9/1/2016 - 5/31/2018

Master of Science in Health Research and Policy

Jackson Vaughan Critical Care Research Award (PI: Tawfik)
Jackson Vaughan Critical Care Research Fund
4/1/2016 – 5/31/2017
Burnout in the NICU Setting and its Relation to Well-being, Patient Safety, and Performance

## **EDITORIAL SERVICE**

# Manuscript Referee for the following (selected):

Health Affairs, Joint Commission Quality & Patient Safety, Applied Clinical Informatics	2021
Annals of Internal Medicine, PLoS ONE, Mayo Clinic Proceedings, Hospital Pediatrics	2020
CMAJ, Health Services Research, Mayo Clinic Proceedings	2019
JAMA Pediatrics, BMJ Open, Critical Care Nurse	2018
J Pediatric Intensive Care, J Perinatology, Neonatology, BMJ Quality & Safety	2017
Hospital Pediatrics	2016

## Abstract Referee for the following:

American Conference on Physician Health	2021
International Conference on Physician Health	2020
American Conference on Physician Health	2019

## INSTITUTIONAL SERVICE

April 2021-present	Member, PICU Interdisciplinary Taskforce Stanford University School of Medicine, Division of Pediatric Critical Care Medicine
March 2021 - June 2021	Member, PICU Hospitalist Search Committee Stanford University School of Medicine, Division of Pediatric Critical Care Medicine
September 2020 - March 2021	Member, Ambulatory Transformation Taskforce Stanford University School of Medicine
April 2020 – present	Member, Awards Subcommittee Society for Critical Care Medicine
November 2019-present	Member, Scholarship Oversight Committee Stanford University School of Medicine, Division of Pediatric Critical Care Medicine
November 2019-present	Division Wellbeing Champion Stanford University School of Medicine, Division of Pediatric Critical Care Medicine
July 2018-present	Course Director, Fellows' Journal Club Stanford University School of Medicine, Division of Pediatric Critical Care Medicine

## **PRESENTATIONS**

#### **Invited Presentations**

- 1. "Statistics for the Boards." Stanford University School of Medicine, Stanford, CA, March 2021
- 2. "Three Good Things: A Fireside Chat." Stanford Employee Wellness and Stress Management, October 2020
- 3. "Local leadership, work-life integration, and health care provider well-being." Stanford University School of Medicine, Stanford, CA, June 2020

- 4. "Healthcare provider burnout and what to do about it." *University of Utah School of Medicine, Salt Lake City, UT, January 2020*
- 5. "Pediatric Critical Care Medicine." Clinical Anatomy Summer Program 2019, Stanford, CA, June 2019
- 6. "Meta-research 101." Stanford University School of Medicine, Stanford, CA, April 2019
- 7. "Statistics for the Boards." Stanford University School of Medicine, Stanford, CA March 2019
- 8. "Pediatric Critical Care Medicine." Clinical Anatomy Summer Program 2018, Stanford, CA, June 2018
- 9. "Combatting burnout in the NICU." High Risk Neonatal Outreach Conference, Menlo Park, CA, May 2017

# National and Regional Meetings

- 1. Sinha A, Bayati M, Adair KC, Shanafelt TD, Sexton JB, Profit J, **Tawfik DS**. Frustration with technology and its relation to healthcare worker emotional exhaustion. *Oral presentation AMIA Virtual Clinical Informatics Conference, May 2021*
- 2. Itoga NK, **Tawfik DS**, Lee CK, Maruyama S, Leeper NJ, Chang TI. Low diastolic blood pressures are associated with an increased risk of myocardial infarction, peripheral arterial disease, and all-cause mortality, but not cerebrovascular accident a reanalysis of ALLHAT. *Oral presentation American Heart Association, Anaheim, CA*, November 2017
- 3. **Tawfik DS**, Sexton JB, Schwartz SP, Chadwick WA, Rehder KJ, Bae J, Bokovoy J, Doram K, Sotile W, Adair KC, Profit J. The associations between work-life balance behaviours, teamwork climate and safety climate: cross-sectional survey introducing the work-life climate scale, psychometric properties, benchmarking data and future directions. *Oral presentation American Conference on Physician Health, San Francisco, CA*, October 2017
- 4. **Tawfik DS**, Phibbs CS, Sexton JB, Kan P, Sharek PJ, Nisbet CC, Rigdon J, Trockel M, Profit J. Factors associated with provider burnout in the neonatal intensive care unit. *Poster presentation American Conference on Physician Health, San Francisco, CA, October 2017*
- 5. **Tawfik DS**, Hamilton WS, Cowan KR, Goldman FD. Exogenous immunoglobulin downregulates T cell receptor signaling and cytokine production. *Poster presentation American Society of Hematology Annual Meeting, San Francisco, CA, December 2008*

#### **International Meetings**

- 1. Sinha A, Steffen KM, **Tawfik DS**. EHR usability and barriers to efficient information gathering on the EHR in the PICU. Oral snapshot presentation Society of Critical Care Medicine 51st Critical Care Congress, January 2022.
- 2. Canty H, **Tawfik DS**, Saynina O, Shaw RJ, Sanders L. Disparities in child mental health access in a large, national sample: Impact of diagnoses made in hospital v. outpatient settings. *Poster presentation Pediatric Academic Societies Annual Meeting (Virtual), May 2021*.
- 3. Profit J, Tembulkar SK, Proulx J, Quinn J, Nisbet C, Chitkara R, Bain LC, **Tawfik DS**, Levoy E, Adair KC, Sexton JB. Evaluating emotional exhaustion in NICU health care workers during a quality improvement collaborative. *Oral presentation Pediatric Academic Societies Annual Meeting (Virtual), May 2021.*
- 4. Sinha A, Stevens LA, Su F, Pageler NM, **Tawfik DS**. Pediatric ICU electronic health record usage as measured by audit logs and screen recordings. *Oral snapshot presentation Society of Critical Care Medicine 50<sup>th</sup> Critical Care Congress (Virtual), January 2021*.
- 5. **Tawfik DS**, Liu JB, Gould JB, Profit J. Survival without major morbidity reporting in neonatal clinical and administrative databases. *Poster presentation Pediatric Academic Societies Annual Meeting, Baltimore, MD, April 2019.*
- 6. **Tawfik DS**, Profit J, Shanafelt TD, Trockel M, Ioannidis JPA. A quantification of reporting bias in the peer-reviewed burnout literature. *Oral presentation International Conference on Physician Health, Toronto, ON, October 2018*

- 7. **Tawfik DS**, Phibbs CS, Lake EL, Liu JB, Sanders LM, Profit J. Development of an adjusted nurse staffing metric in the neonatal intensive care unit. *Poster presentation Pediatric Academic Societies Annual Meeting, Toronto, ON, May 2018*
- 8. **Tawfik DS**, Gould JB, Profit J, Danielsen B. Comparison of perinatal risk factor and outcome coding in clinical and administrative databases. *Poster presentation Pediatric Academic Societies Annual Meeting, Toronto, ON, May 2018*
- 9. Lin JL, **Tawfik DS**, Gupta R, Owens DK, Bendavid E. Cost effectiveness of posterior spinal fusion for children with neuromuscular scoliosis. *Poster presentation Society for Medical Decision Making Annual Meeting, Pittsburgh, PA, October 2017*
- 10. **Tawfik DS**, Phibbs CS, Sexton JB, Kan P, Sharek PJ, Nisbet CC, Rigdon J, Trockel M, Profit J. Factors associated with provider burnout in the neonatal intensive care unit. *Poster presentation Pediatric Academic Societies Annual Meeting, San Francisco, CA, May 2017*
- 11. **Tawfik DS**, Valencia A, Gretler B, Mathew R, Cornfield DN, Damian M. Clinician diagnosis of pneumonia in ventilated children diverges from published guidelines. *Oral snapshot presentation Society of Critical Care Medicine 46th Critical Care Congress, Honolulu, HI, January 2017*
- 12. **Tawfik DS**, Kan P, Sharek PJ, Nisbet CC, Rigdon J, Sexton JB, Profit J. Burnout in the NICU setting and its relation to healthcare-associated infections. *Poster presentation International Conference on Physician Health, Boston, MA, September 2016*
- 13. **Tawfik DS**, Bennett TB, Welch B, Poss WB. Use of high frequency ventilation in the pediatric intensive care unit. *Poster presentation Pediatric Academic Societies Annual Meeting, Vancouver, B.C., May 2014*
- 14. **Tawfik DS**, Bennett TB, Welch B, Poss WB. Use of high frequency ventilation in the pediatric intensive care unit. Oral presentation 31<sup>st</sup> Annual Conference on High-Frequency Ventilation of Infants, Children, & Adults, Snowbird, UT, March 2014