

Stanford



Melissa Scala

Clinical Professor, Pediatrics - Neonatology

CLINICAL OFFICE (PRIMARY)

- **Pediatric Hospital Medicine**

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Bio

CLINICAL FOCUS

- Developmental Care
- Care of the Preterm Newborn
- Neonatal-Perinatal Medicine

ACADEMIC APPOINTMENTS

- Clinical Professor, Pediatrics - Neonatology

PROFESSIONAL EDUCATION

- Medical Education: Georgetown University School of Medicine (1997) DC
- Fellowship: Georgetown University Hospital (2012) DC
- Residency: University of Alabama at Birmingham (2001) AL
- Board Certification: Neonatal-Perinatal Medicine, American Board of Pediatrics (2014)
- Board Certification: Pediatrics, American Board of Pediatrics (2001)

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Neonatal-Perinatal Medicine (Fellowship Program)

Publications

PUBLICATIONS

- **Care Across Contexts: Patterns of Caregiver-Infant Engagement in Spanish- and English-Speaking Families of Preterm Infants.** *medRxiv : the preprint server for health sciences*
Rios, P. M., Marchman, V. A., Ontiveros Perez, N. L., Travis, K. E., Lazarus, M. F., Scala, M., Feldman, H. M.
2026

- **Neonatal brain-age models in full- and preterm infants.** *bioRxiv : the preprint server for biology*
Chiu, H., Richie-Halford, A. C., Lazarus, M. F., Rokem, A., Poblaciones, R. V., Marchman, V. A., Travis, K. E., Scala, M. L., Feldman, H. M., Yeatman, J. D.
2026
- **Promoting bonding and secure attachment in the NICU to improve parent-infant mental health: recommendations for clinical practice.** *Journal of perinatology : official journal of the California Perinatal Association*
Yui, Y., Pazandak, C. C., Barbeau, D. Y., Spencer, M., Scala, M., Givrad, S.
2026
- **Continuity of Caregiving: Observed Nicu Engagement as a Marker of Later Home Environments in Preterm Hispanic and Non-Hispanic Families.**
Rios, P., Marchman, V., Lazarus, M., Ontiveros, N., Scala, M., Feldman, H.
LIPPINCOTT WILLIAMS & WILKINS.2026
- **Assessing the Impact of a NICU Book Cart on Staff and Caregiver Speech to Very Preterm Infants.** *medRxiv : the preprint server for health sciences*
Montgomery, S., Look, A., Lazarus, M., Marchman, V. A., Scala, M., Travis, K. E.
2025
- **Skin-to-Skin Holding in Relation to White Matter Microstructure in Infants Born Preterm.** *Neurology*
Travis, K. E., Lazarus, M. F., Scala, M., Marchman, V. A., Bruckert, L., Velasco Poblaciones, R., Dubner, S. E., Feldman, H. M.
2025; 105 (8): e214138
- **Listening to mom in the neonatal intensive care unit: a randomized trial of increased maternal speech exposure on white matter connectivity in infants born preterm** *FRONTIERS IN HUMAN NEUROSCIENCE*
Travis, K. E., Scala, M., Marchman, V. A., Wu, H., Dodson, C. K., Bruckert, L., Lazarus, M. F., Poblaciones, R., Yeom, K. W., Feldman, H. M.
2025; 19
- **Listening to mom in the neonatal intensive care unit: a randomized trial of increased maternal speech exposure on white matter connectivity in infants born preterm.** *Frontiers in human neuroscience*
Travis, K. E., Scala, M., Marchman, V. A., Wu, H., Dodson, C. K., Bruckert, L., Lazarus, M. F., Poblaciones, R. V., Yeom, K. W., Feldman, H. M.
2025; 19: 1673471
- **From Hospital to Home: Continuity between Skin-to-Skin Care and Later Verbal Engagement in Infants Born Preterm.** *The Journal of pediatrics*
Rios, P. M., Marchman, V. A., Lazarus, M. F., Ontiveros Perez, N. L., Scala, M., Travis, K. E., Feldman, H. M.
2025: 114837
- **From Hospital to Home: Continuity between Skin-to-Skin Care and Later Verbal Engagement in Infants Born Preterm.** *medRxiv : the preprint server for health sciences*
Rios, P. M., Marchman, V. A., Lazarus, M. F., Ontiveros Perez, N. L., Scala, M., Travis, K. E., Feldman, H. M.
2025
- **Advancing Women Physicians in Academic Medicine: A Scoping Review** *ACADEMIC MEDICINE*
Purkey, N. J., Han, P., Woodward, A., Davis, A. S., Johnston, L., Klein, R., Krawczeski, C. D., Leeman, K. T., Machut, K. Z., Patel, M. D., Scala, M., McBride, M. E.
2025; 100 (7): 860-870
- **The Power of Early Experience: Neonatal Skin-To-Skin Care Mitigates SES-Related Disparities in Developmental Outcomes.** *Infancy : the official journal of the International Society on Infant Studies*
Lazarus, M. F., Marchman, V. A., Feldman, H. M., Scala, M., Travis, K. E.
2025; 30 (3): e70024
- **Skin-to-skin holding in relation to white matter connectivity in infants born preterm.** *medRxiv : the preprint server for health sciences*
Travis, K. E., Lazarus, M. F., Scala, M., Marchman, V. A., Bruckert, L., Poblaciones, R. V., Dubner, S., Feldman, H. M.
2025
- **Neonatal inflammation and near-term white matter microstructure in infants born very preterm.** *Neuroimage. Reports*
Anderson, K. G., Lazarus, M. F., Bruckert, L., Poblaciones, R. V., Scala, M., Marchman, V. A., Feldman, H. M., Travis, K. E.
2024; 4 (4)

- **Inpatient Skin-to-Skin Care Predicts 12-month Neurodevelopmental Outcomes in Very Preterm Infants.** *The Journal of pediatrics*
Lazarus, M. F., Marchman, V. A., Brignoni-Perez, E., Dubner, S., Feldman, H. M., Scala, M., Travis, K. E.
2024; 114:190
- **Introducing the i-Rainbow©: An Evidence-Based, Parent-Friendly Care Pathway Designed for Critically Ill Infants in the NICU Setting.** *Pediatric physical therapy : the official publication of the Section on Pediatrics of the American Physical Therapy Association*
Byrne, E. M., Hunt, K., Scala, M.
2024; 36 (2): 266-273
- **Increasing in-person medical interpreter utilization in the NICU through a bundle of interventions.** *Journal of perinatology : official journal of the California Perinatal Association*
Feister, J., Razdan, S., Sharp, D., Punjabi, S., Blecharczyk, E., Escobar, V., Gay, P. M., Scala, M., Bonifacio, S.
2024
- **Sample entropy correlates with intraventricular hemorrhage and mortality in premature infants early in life.** *Pediatric research*
Scahill, M. D., Chock, V., Travis, K., Lazarus, M., Helfenbein, E., Scala, M.
2024
- **The Safety of Body Wraps on Skin-to-Skin Care in the Neonatal Population: A Pilot Study.** *Advances in neonatal care : official journal of the National Association of Neonatal Nurses*
Freccero, A., Scala, M., McLeod, K. A., Donahue, B., Webb, M., Briggs, M., Najm, I., Sinha, M., Santagata, L., Dahlen, A., Nasr, A.
2023
- **Early, low-dose hydrocortisone and near-term brain connectivity in extremely preterm infants.** *Pediatric research*
Dubner, S. E., Rickerich, L., Bruckert, L., Poblaciones, R. V., Sproul, D., Scala, M., Feldman, H. M., Travis, K. E.
2023
- **Neurodevelopmental, Mental Health, and Parenting Issues in Preterm Infants.** *Children (Basel, Switzerland)*
Shaw, R. J., Givrad, S., Poe, C., Loi, E. C., Hoge, M. K., Scala, M.
2023; 10 (9)
- **Recommendations for creating a collaborative NICU environment to support teamwork and trainee education.** *Journal of perinatology : official journal of the California Perinatal Association*
Marc-Aurele, K., Branche, T., Adams, A., Feister, J., Boyle, K., Scala, M.
2023
- **Optimizing clinical care and training in the neonatal intensive care unit: the relationship between front line providers and physician trainees.** *Journal of perinatology : official journal of the California Perinatal Association*
Dyess, N. F., Keels, E., Myers, P., French, H., Reber, K., LaTuga, M. S., Johnston, L. C., Frontline Provider Interprofessional Writing Group (FLIP), Scala, M., Marc-Aurele, K., Branche, T., Adams, A., Feister, J., et al
2023
- **Maternal mental health and engagement in developmental care activities with preterm infants in the NICU.** *Journal of perinatology : official journal of the California Perinatal Association*
Dubner, S. E., Morales, M. C., Marchman, V. A., Shaw, R. J., Travis, K. E., Scala, M.
2023
- **Inpatient Kangaroo Care Predicts Early Cognitive Development at 6 and 12 Months in Infants Born Very Preterm.** *medRxiv : the preprint server for health sciences*
Lazarus, M. F., Marchman, V. A., Brignoni-Perez, E., Dubner, S., Feldman, H. M., Scala, M., Travis, K. E.
2023
- **Investigating relations between the NICU speech environment and weight gain in infants born very preterm.** *American journal of perinatology*
Kumar, K., Marchman, V. A., Morales, M. C., Scala, M., Travis, K. E.
2023
- **Evaluation of a course for neonatal fellows on providing psychosocial support to NICU families.** *PEC innovation*
Scala, M., Marchman, V. A., Dowtin, L. L., Givrad, S., Nguyen, T., Thomson, A., Gao, C., Sorrells, K., Hall, S.
2022; 1: 100053

- **Disparities in Kangaroo Care for Premature Infants in the Neonatal Intensive Care Unit.** *Journal of developmental and behavioral pediatrics : JDBP*
Brignoni-Perez, E., Scala, M., Feldman, H. M., Marchman, V. A., Travis, K. E.
2021
- **Impact of the COVID-19 pandemic on developmental care practices for infants born preterm.** *Early human development*
Scala, M., Marchman, V. A., Brignoni-Perez, E., Morales, M. C., Dubner, S. E., Travis, K. E.
2021; 163: 105483
- **Listening to Mom in the NICU: effects of increased maternal speech exposure on language outcomes and white matter development in infants born very preterm.** *Trials*
Brignoni-Perez, E., Morales, M. C., Marchman, V. A., Scala, M., Feldman, H. M., Yeom, K., Travis, K. E.
2021; 22 (1): 444
- **Barriers to Kangaroo Care in the NICU: A Qualitative Study Analyzing Parent Survey Responses.** *Advances in neonatal care : official journal of the National Association of Neonatal Nurses*
Saltzmann, A. M., Sigurdson, K., Scala, M.
2021
- **PretermConnect: Leveraging mobile technology to mitigate social disadvantage in the NICU and beyond.** *Seminars in perinatology*
Jani, S. G., Nguyen, A. D., Abraham, Z., Scala, M., Blumenfeld, Y. J., Morton, J., Nguyen, M., Ma, J., Hsing, J. C., Moiwah-Grant, M., Profit, J., Wang, C. J.
2021: 151413
- **Retrospective Cohort Study of Early Postnatal Hydrocortisone in Infants Born Extremely Preterm and 12 Month Outcomes**
Dubner, S. E., Scala, M., Feldman, H. M., Travis, K. E.
LIPPINCOTT WILLIAMS & WILKINS.2021: S22
- **Disparities in Kangaroo Care in the Neonatal Intensive Care Unit as a function of Mother's Language**
Brignoni-Perez, E., Scala, M., Marchman, V. A., Feldman, H. M., Travis, K. E.
LIPPINCOTT WILLIAMS & WILKINS.2021: S24-S25
- **Retrospective Cohort Study of Early Postnatal Hydrocortisone in Infants Born Extremely Preterm and 12 Month Outcomes**
Dubner, S. E., Scala, M., Feldman, H. M., Travis, K. E.
LIPPINCOTT WILLIAMS & WILKINS.2021: S22
- **Disparities in Kangaroo Care in the Neonatal Intensive Care Unit as a function of Mother's Language**
Brignoni-Perez, E., Scala, M., Marchman, V. A., Feldman, H. M., Travis, K. E.
LIPPINCOTT WILLIAMS & WILKINS.2021: S24-S25
- **Promoting infant mental health in the neonatal intensive care unit (NICU): A review of nurturing factors and interventions for NICU infant-parent relationships.** *Early human development*
Givrad, S., Hartzell, G., Scala, M.
2020: 105281
- **Former NICU Families Describe Gaps in Family-Centered Care.** *Qualitative health research*
Sigurdson, K., Profit, J., Dhurjati, R., Morton, C., Scala, M., Vernon, L., Randolph, A., Phan, J. T., Franck, L. S.
2020: 1049732320932897
- **Assessing speech exposure in the NICU: Implications for speech enrichment for preterm infants.** *Journal of perinatology : official journal of the California Perinatal Association*
Scala, M. L., Marchman, V. A., Godenzi, C. n., Gao, C. n., Travis, K. E.
2020
- **Premature Infants Conceived with Assisted Reproductive Technology: An Analysis of Infant Morbidity, Compared with Infants Conceived Naturally** *AMERICAN JOURNAL OF PERINATOLOGY*
Scala, M., Berg, J., Keszler, M., Abubakar, K.
2019; 36 (3): 258-261
- **Effect of reading to preterm infants on measures of cardiorespiratory stability in the neonatal intensive care unit** *JOURNAL OF PERINATOLOGY*

Scala, M., Seo, S., Lee-Park, J., McClure, C., Scala, M., Palafoutas, J., Abubakar, K.
2018; 38 (11): 1536-1541

- **Effect of reading to preterm infants on measures of cardiorespiratory stability in the neonatal intensive care unit.** *Journal of perinatology : official journal of the California Perinatal Association*
Scala, M., Seo, S., Lee-Park, J., McClure, C., Scala, M., Palafoutas, J. J., Abubakar, K.
2018
- **Premature Infants Conceived with Assisted Reproductive Technology: An Analysis of Infant Morbidity, Compared with Infants Conceived Naturally.** *American journal of perinatology*
Scala, M., Berg, J., Keszler, M., Abubakar, K.
2018
- **Pilot study of dornase alfa (Pulmozyme) therapy for acquired ventilator-associated infection in preterm infants.** *Pediatric pulmonology*
Scala, M., Hoy, D., Bautista, M., Palafoutas, J. J., Abubakar, K.
2017