IN THE COURT OF COMMON PLEAS
FOR FRANKLIN COUNTY, OHIO

MADELINE MOE, et al.	Case No. _____
	Judge _____
Plaintiffs,	
v.	
DAVID YOST, et al.	
Defendants.	

EXPERT AFFIDAVIT OF JACK TURBAN, M.D.

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EXPERT AFFIDAVIT OF JACK TURBAN, M.D.

INTRODUCTION

I, Jack Turban, M.D., hereby declare and state as follows:

1. I have been retained by counsel for Plaintiffs as an expert in connection with the above-captioned litigation. I am over 18 years of age, of sound mind, and in all respects competent to testify.

2. I have actual knowledge of the matters stated herein.

3. In preparing this affidavit, I reviewed Ohio H.B. 68 (hereafter "the medical care ban"). In addition to that legislation and the materials cited herein, I have also relied on my years of research and other experience, as set out in my curriculum vitae (**Exhibit A**) in forming my opinions. The materials I have relied upon in preparing this affidavit are the same types of materials that experts in my field of study regularly rely upon when forming opinions on the subject, and particular studies that I rely upon are included in the bibliography (**Exhibit B**). I may wish to supplement these opinions or the bases for them as a result of new scientific research or publications or in response to statements and issues that may arise in my area of expertise.

BACKGROUND AND QUALIFICATIONS

4. I am currently an Assistant Professor of Child & Adolescent Psychiatry at the University of California, San Francisco (UCSF) School of Medicine, where I am also Affiliate Faculty at the Philip R. Lee Institute for Health Policy Studies. As a member of the faculty at UCSF, I serve as director of the Gender Psychiatry Program in the Division of Child & Adolescent Psychiatry. I also serve as an attending psychiatrist in the adult LGBT psychiatry clinic, and in the eating disorders program. I conduct research focusing on the determinants of mental health among

transgender youth and teach medical students, psychology trainees, psychiatry residents, and child and adolescent psychiatry fellows.

5. I received my undergraduate degree in neuroscience from Harvard College. I received both my MD and Master of Health Science degrees from Yale University School of Medicine. I completed residency training in general psychiatry in the combined Massachusetts General Hospital / McLean Hospital residency training program (Harvard Medical School) and fellowship training in child and adolescent psychiatry at Stanford University. I am board certified in psychiatry by The American Board of Psychiatry and Neurology.

6. My research focuses on the mental health of transgender youth and gender dysphoria. While at Yale, I was awarded the Ferris Prize for my thesis entitled "Evolving Treatment Paradigms for Transgender Youth." In 2017, I received the United States Preventative Health Services Award for Excellence in Public Health, based on my work related to the mental health of transgender youth. I have lectured on the mental health of transgender youth at Yale School of Medicine, UCSF, Stanford University, and The Massachusetts General Hospital (a teaching hospital of Harvard Medical School). I have given grand rounds presentations around the country and have presented nationally and internationally on topics related to the mental health of transgender people and people experiencing gender dysphoria.

7. I have served as a manuscript reviewer for numerous professional publications, including *The Journal of The American Medical Association (JAMA), JAMA Pediatrics, JAMA Psychiatry, The Journal of The American Academy of Child & Adolescent Psychiatry, Pediatrics, Annals of Internal Medicine, The Journal of Child Psychology and Psychiatry, The Journal of Adolescent Health, Academic Psychiatry, Journal of Autism and Developmental Disorders,* and *The American Journal of Public Health*. I have served as lead author for textbook chapters on the

mental health of transgender youth, including for *Lewis's Child & Adolescent Psychiatry: A Comprehensive Textbook* and the textbook of The International Academy for Child & Adolescent Psychiatry and Allied Professionals. I am co-editor of the textbook *Pediatric Gender Identity: Gender-Affirming Care for Transgender and Gender Diverse Youth* and a contributing editor for *the Journal of the American Academy of Child & Adolescent Psychiatry*.

8. I have published extensively on the topic of transgender youth, including nine articles in peer-reviewed journals within the past two years.

9. In the last four years, I have been retained as an expert and provided testimony in the following cases: *K.C. v. Individual Members of Medical Licensing Board of Indiana, et al.*, No. 1:23-CV-00595 (S.D. Ind. 2023) (deposition); *Poe v. Drummond*, No. 4:23-CV-00277 (N.D. Okla. 2023) (declaration); *Poe et al. v. Labrador et al.*, No. 1:23-CV-269 (D. Idaho 2023) (deposition); *L.W. et al. v. Skrmetti et al.*, No. 3:23-CV-00376 (M.D. Tenn. 2023) (declaration); *Regino v. Staley*, No. 2:23-CV-00032 (E.D. Cal. 2023) (declaration); *PFLAG, Inc. et al. v. Abbott et al.*, Cause No. D-1-GN-22-002569 (459th Judicial District, Travis County, Texas 2022) (evidentiary hearing); *Brandt et al. v. Griffin et al.*, No. 4:21-CV-450 (D. Ark. 2021) (deposition and trial testimony); *Hecox et al. v. Little et al.*, No. 1:20-CV-184 (D. Idaho 2020) (declaration).

10. I am being compensated at an hourly rate of $400 per hour for preparation of expert affidavits and reports, and for time spent preparing for or giving deposition or trial testimony. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I provide.

SUMMARY OF OPINIONS

11. In this declaration, I cite relevant literature to support my opinions that: (1) gender-affirming medical interventions improve mental health outcomes for adolescents with gender dysphoria when medically indicated; (2) adolescents who experience gender dysphoria at the onset

of puberty rarely come to identify with their sex assigned at birth; (3) regret among individuals receiving medical treatment for gender dysphoria is uncommon; and (4) the legislative findings that accompanied the medical care ban contained numerous misstatements of the relevant literature regarding gender identity and gender dysphoria and were incorrect with respect to the scientific and medical evidence regarding the safety and efficacy of gender-affirming medical care for adolescent gender dysphoria.

GENDER-AFFIRMING MEDICAL INTERVENTIONS IMPROVE MENTAL HEALTH OUTCOMES FOR ADOLESCENTS WITH GENDER DYSPHORIA WHEN MEDICALLY INDICATED

12. The medical care ban is not supported by data and runs counter to the widely accepted views of the mainstream medical community. Existing research shows gender-affirming medical treatments for adolescents with gender dysphoria are consistently linked to improved mental health, and denial of such care is expected to lead to adverse mental health outcomes, including, in some instances, worsening suicidality.

13. All of the major medical organizations in the United States have highlighted the importance of gender-affirming medical care for adolescents with gender dysphoria and have issued explicit statements opposing bans on this care. These organizations include The American Medical Association, The American Academy of Pediatrics, The American Psychiatric Association, The American College of Physicians, The American Academy of Family Physicians, The American Academy of Child & Adolescent Psychiatry, The Endocrine Society, The Pediatric Endocrine Society, The World Professional Association for Transgender Health, and the United States Professional Association for Transgender Health, among many others.[1]

[1] For a list of statements, please see Turban, J. L., Kraschel, K. L., & Cohen, I. G. (2021). Legislation to criminalize gender-affirming medical care for transgender youth. *JAMA, 325*(22), 2251-2252.

14. A substantial body of evidence links gender-affirming medical interventions to improved mental health outcomes for adolescents with gender dysphoria, who, without treatment, experience higher levels of depression, anxiety, and suicidality. While each of these studies as with all studies in medicine has strengths and limitations, and no one study design can answer all questions regarding an intervention, taken together, these studies indicate that gender-affirming medical care improves mental health for adolescents who require such care.

15. Peer-reviewed cross-sectional and longitudinal studies[2] have found that pubertal suppression is associated with a range of improved mental health outcomes for adolescents with gender dysphoria, including statistically significant improvements in internalizing psychopathology (*i.e.*, anxiety and depression), externalizing psychopathology (*e.g.*, disruptive behaviors), global functioning, and suicidality.[3] For example, in the realm of cross-sectional studies, Turban et al. *Pediatrics* 2020 found that, after controlling for a range of other variables,

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[2] A note on methodology: cross-sectional studies examine mental health at a single point in time. For example, van der Miesen et al. 2020 *Journal of Adolescent Health* compared, at a single time point, those who accessed pubertal suppression with those who desired but had not accessed it. van der Miesen, A.I.R., Steensma, T.D., de Vries, A.L.C., *et al.* (2020). Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared with Cisgender General Population Peers. *Journal of Adolescent Health*, 66(6), 699-704. Longitudinal studies examine multiple time points (e.g., looking at levels of suicidality before and after gender-affirming medical care).

[3] See for example, de Vries, A.L., Steensma, T.D., Doreleijers, T.A., & Cohen-Kettenis, P.T. (2011). Puberty suppression in adolescents with gender identity disorder: a prospective follow-up study. *The Journal of Sexual Medicine*, 8(8), 2276-2283; Turban, J.L., King, D., Carswell, J.M., & Keuroghlian, A.S. (2020). Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation. *Pediatrics*, 145(2):e20191725; van der Miesen, A.I.R., Steensma, T.D., de Vries, A.L.C, *et al.* (2020). Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared with Cisgender General Population Peers. *Journal of Adolescent Health*, 66(6), 699-704; and Achille, C., Taggart, T., Eaton, N.R., *et al.* (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: preliminary results. *International Journal of Pediatric Endocrinology*, 2020(8), 1-5.

those who accessed pubertal suppression had lower odds of lifetime suicidal ideation than those who desired but were unable to access this intervention during adolescence.[4] A similar study by van der Miesen et al. in the *Journal of Adolescent Health* compared 272 adolescents who had not yet received pubertal suppression with 178 adolescents who had been treated with pubertal suppression.[5] Those who had received pubertal suppression had statistically significant lower "internalizing psychopathology" scores (a measure of anxiety and depression). Longitudinal studies have yielded similar results.[6]

16. Peer-reviewed research studies have likewise found improved mental health outcomes following gender-affirming hormone treatment (*e.g.*, estrogen or testosterone) for individuals with gender dysphoria, including adolescents. These include statistically significant improvements in internalizing psychopathology (*e.g.*, anxiety and depression), general well-being, and suicidality.[7] For example, Chen et al. followed a cohort of 315 transgender youth receiving

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[4] Turban, J.L., King, D., Carswell, J.M., & Keuroghlian, A.S. (2020). Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation. *Pediatrics*, 145(2):e20191725.

[5] van der Miesen, A.I.R., Steensma, T.D., de Vries, A.L.C., *et al.* (2020). Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared with Cisgender General Population Peers. *Journal of Adolescent Health*, 66(6), 699-704.

[6] See for example, de Vries, A.L., McGuire, J.K., Steensma, T.D., *et al.* (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134(4), 696-704; and Costa, R., Dunsford, M., Skagerberg, E., Holt, V., *et al.* (2015). Psychological Support, Puberty Suppression, and Psychosocial Functioning in Adolescents with Gender Dysphoria. *Journal of Sexual Medicine*, 12(11), 2206-2214.

[7] See for example, Chen, D., Berona, J., Chan, Y.M., *et al.* (2023). Psychosocial Functioning in Transgender Youth after 2 Years of Hormones. *New England Journal of Medicine*, 388(3), 240-250; Allen, L.R., Watson, L.B., Egan, A.M., & Moser, C.N. (2019). Well-being and suicidality among transgender youth after gender-affirming hormones. *Clinical Practice in Pediatric Psychology*, 7(3), 302-311; Achille, C., Taggart, T., Eaton, N.R., *et al.* (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: preliminary results. *International Journal of Pediatric Endocrinology*, 2020(8), 1-5; and

gender-affirming hormone treatment and found improvements in anxiety, depression, and life satisfaction.[8] In that study, parallel-process models were used to show that appearance congruence tracked along with improvements in mental health, indicating that physical changes from gender-affirming hormone treatment were the cause of improved mental health. Similarly, Allen et al. followed a cohort of 47 adolescents with gender dysphoria, and found statistically significant improvements in general well-being and suicidality, as measured by the National Institutes of Health "Ask Suicide Screening Questions" instrument.[9] Cross-sectional studies comparing those who accessed gender-affirming hormones during adolescence to those who did not access these interventions have similarly linked access to gender-affirming hormone treatment during adolescence to lower odds of suicidality.[10]

17. Overall, as summarized above, existing peer-reviewed published research studies consistently link gender-affirming medical interventions to improved mental health for individuals with gender dysphoria, including adolescents.

López de Lara, D., Pérez Rodríguez, O., Cuellar Flores, I., *et al.* (2020). Psychosocial Assessment in Transgender Adolescents. *Anales de Pediatria (English Edition)*, 93(1), 41-48.

[8] Chen, D., Berona, J., Chan, Y.M., *et al.* (2023). Psychosocial Functioning in Transgender Youth after 2 Years of Hormones. *New England Journal of Medicine*, 388(3), 240-250.

[9] Allen, L.R., Watson, L.B., Egan, A.M., & Moser, C.N. (2019). Well-being and suicidality among transgender youth after gender-affirming hormones. *Clinical Practice in Pediatric Psychology*, 7(3), 302-311.

[10] See for example, Turban, J.L., King, D., Kobe, J., *et al.* (2022). Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults. *PLoS One*, 17(1):e0261039; and Green, A.E., DeChants, J.P., Price, M.N., *et al.* (2022). Association of Gender-Affirming Hormone Therapy with Depression, Thoughts of Suicide, and Attempted Suicide Among Transgender and Nonbinary Youth. *Journal of Adolescent Health*, 70(4), 643-649.

18. There are no evidence-based interventions, other than gender-affirming medical care, that treat adolescent gender dysphoria. There are no evidence-based psychotherapy protocols that have been shown to effectively treat gender dysphoria. In other words, though the H.B. 68 lawmakers quarrel with the strength of the studies that demonstrate the efficacy of gender-affirming medical interventions, there are *no studies of any kind* indicating improved health outcomes from psychotherapy alone to treat gender dysphoria.[11] And what clinical experience has shown is that psychotherapy alone, without medical intervention where indicated, does not improve gender dysphoria. Under the medical care ban, medical and mental health providers would be left with no evidence-based treatment approaches to support their adolescent patients with gender dysphoria. This would be a devastating situation for adolescents and their parents, physicians, and other mental health providers who care for them.

19. In the past, some clinicians have described psychotherapeutic strategies that aimed to result in youth with gender dysphoria identifying with their sex assigned at birth, hoping such approaches would alleviate gender dysphoria.[12] Such practices, termed "gender identity conversion efforts," have subsequently been linked to adverse mental health outcomes, including suicide attempts.[13] In addition to being harmful, there is no peer-reviewed research to suggest that

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[11] Of note, some adolescents with gender dysphoria may also have other co-occurring conditions that should be treated with psychotherapy (*e.g.*, obsessive compulsive disorder should be treated with exposure and response prevention therapy), but these treatments for co-occurring conditions should not be confused with treating gender dysphoria.

[12] Meyer-Bahlburg, H.F. (2002). Gender Identity Disorder in Young Boys: A Parent-and Peer-Based Treatment Protocol. *Clinical Child Psychology and Psychiatry*, 7(3), 360-376.

[13] Turban, J.L., Beckwith, N., Reisner, S.L., & Keuroghlian, A.S. (2020). Association Between Recalled Exposure to Gender Identity Conversion Efforts and Psychological Distress and Suicide Attempts Among Transgender Adults. *JAMA Psychiatry*, 77(1), 68-76.

these gender identity conversion efforts are successful in changing a person from transgender to cisgender. Gender identity conversion efforts have been labelled unethical by major medical organizations including The American Medical Association[14] and The American Academy of Child & Adolescent Psychiatry.[15] The United Nations has called for an end to the practice worldwide.[16]

20. The studies supporting the efficacy of gender-affirming care have had substantially long follow-up periods, particularly when compared to other commonly used medications in pediatrics. For example, one study by deVries et al. in the journal *Pediatrics* examined mental health outcomes a mean 5.9 years after starting pubertal suppression.[17] Turban et al. 2022 *PLoS One*, which found associations between access to gender-affirming hormone treatment during adolescence and better mental health outcomes, similarly examined mental health outcomes a mean six to seven years after starting gender-affirming hormones.[18] To put this into context, a major study used by the FDA to approve the medication lurasidone for bipolar depression in

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[14] American Medical Association (2018). Health Care Needs of Lesbian, Gay, Bisexual and Transgender and Queer Populations. H-160.991. *Available at* https://policysearch.ama-assn.org/policyfinder/detail/gender%20identity?uri=%2FAMADoc%2FHOD.xml-0-805.xml.

[15] American Academy of Child & Adolescent Psychiatry (2018). Conversion Therapy. *Available at* https://www.aacap.org/AACAP/Policy_Statements/2018/Conversion_Therapy.aspx.

[16] United Nations (2020). Practices of so-called "conversion therapy." *Available at* https://digitallibrary.un.org/record/3870697?ln=en&v=pdf.

[17] de Vries, A.L., McGuire, J.K., Steensma, T.D., *et al.* (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134(4), 696-704.

[18] Turban J.L., King D., Kobe J., *et al.* (2022). Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults. *PLoS One*. 17(1):e0261039.

children and adolescents followed study participants for six weeks.[19] If the state were to ban all medications that lack at least a decade of long-term follow up studies, that would require banning a substantial proportion of FDA-approved and relied-upon medications.

21. Given the well-documented benefits of gender-affirming medical care outlined above, and the known harms of untreated adolescent gender dysphoria, banning this care is expected to lead to substantial deterioration of mental health for adolescents diagnosed with gender dysphoria. For many of these patients, this is likely to include worsening suicidality.[20] A recent qualitative study of 273 parents of transgender youth identified that bans on gender-affirming care led to substantial concerns that their children would have worsening mental health and be at an increased risk of death from suicide.[21] These parents implored lawmakers to leave critical decisions about gender-affirming medical interventions to families and their medical providers.[22] While parent-report-only studies (*i.e.*, those that do not include the perspectives of patients themselves) should be interpreted with caution, these findings closely align with the other patient-report studies mentioned earlier and thus warrant serious concern. Another qualitative study of 103 healthcare providers who care for transgender youth similarly identified substantial concerns that

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[19] DelBello, M.P., Goldman, R., Phillips, D., *et al.* (2017). Efficacy and Safety of Lurasidone in Children and Adolescents with Bipolar I Depression: A Double-Blind, Placebo-Controlled Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(12), 1015-1025.

[20] See, for example, Green, A.E., DeChants, J.P., Price, M.N., *et al.* (2022). Association of Gender-Affirming Hormone Therapy with Depression, Thoughts of Suicide, and Attempted Suicide Among Transgender and Nonbinary Youth. *Journal of Adolescent Health*, 70(4), 643-649 and other studies cited above.

[21] Kidd, K.M., Sequeira, G.M., Paglisotti, T., *et al.* (2021). "This Could Mean Death for My Child": Parent Perspectives on Laws Banning Gender-Affirming Care for Transgender Adolescents. *Journal of Adolescent Health*, 68(6), 1082-1088.

[22] *Id.*

such bans would lead to worsening mental health and increased risk of suicide for adolescents with gender dysphoria.[23]

ADOLESCENTS WHO EXPERIENCE GENDER DYSPHORIA AT THE ONSET OF PUBERTY RARELY COME TO IDENTIFY WITH THEIR ASSIGNED SEX AT BIRTH

22. Though the terms "children" and "adolescents" are sometimes used synonymously in common parlance, these terms have specific and distinct meanings in the context of child and adolescent psychiatric research. In this field, "child" and "children" refer to minors who have not yet reached the earliest stages of puberty (*i.e.*, Tanner Stage 2). The terms "adolescent" and "adolescents" refer to minors who have begun puberty. Studies of prepubertal children (who are not candidates for gender-affirming medical interventions under any existing clinical guidelines) cannot be conflated with studies of adolescents (who, depending on several factors, may be candidates for various forms of gender-affirming medical interventions).

23. This distinction is vital in the realm of "desistence" studies (*i.e.*, studies that aim to assess how many young people who identify as transgender will later identify as cisgender). The suggestion that a majority of transgender minors affected by this law will come to identify with their assigned sex at birth inappropriately relies on studies of gender diverse *prepubertal* children, which have, in the past, shown that many of these children will not grow up to be transgender. These studies do not apply to transgender minors who have reached puberty (*i.e.*, "adolescents"). Once a transgender youth begins puberty, it is rare for them to later identify as cisgender.[24]

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[23] Hughes, L.D., Kidd, K.M., Gamarel, K.E., *et al.* (2021). "These Laws Will Be Devastating": Provider Perspectives on Legislation Banning Gender-Affirming Care for Transgender Adolescents. *Journal of Adolescent Health*, 69(6), 976-982.

[24] See for example de Vries, A.L., McGuire, J.K., Steensma, T.D., *et al.* (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134(4), 696-704; and Turban, J.L., de Vries, A.L.C., & Zucker, K. (2018). Gender Dysphoria and Gender Incongruence. In Martin A., Bloch M.H., & Volkmar F.R. (Editors): *Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook, Fifth Edition*. Philadelphia: Wolters Kluwer. This

Furthermore, physicians and families must weigh the low risk of a future cisgender identification against the often substantial risk of deteriorating mental health due to active gender dysphoria. Under existing medical guidelines, any minor who is considering gender-affirming medical or surgical interventions must first work with a mental health professional to conduct a complete biopsychosocial evaluation, which includes ensuring that an adolescent and their parents understand the complexity of this decision. Such evaluations are designed to minimize regret rates.

24. Any study regarding prepubertal children and their likelihood of ultimately identifying as transgender should not be used to assess the interventions targeted by the medical care ban, namely, pubertal suppression, hormone therapy, and gender-affirming surgery, since none of these interventions are provided to prepubertal patients with gender dysphoria under current medical guidelines.[28]

25. Further, the utility of "desistence" studies even for assessing the likelihood that prepubertal children will persist in a transgender identity has been questioned due to their reliance on an outdated diagnosis of "gender identity disorder in children," which did not require a child to identify as a sex different than their sex assigned at birth. This diagnosis likely captured many cisgender "tomboys" or cisgender boys with feminine interests like dresses or dolls, who never identified as transgender and, thus, unsurprisingly did not identify as transgender when followed up with later in life. In contrast, the diagnosis of "gender dysphoria in children" requires one to not merely have gender atypical interests and behaviors; one must identify as a gender different

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textbook chapter provides comments from the directors of two of the oldest and most established gender clinics in the world.

[28] Hembree, W.C., Cohen-Kettenis, P.T., Gooren, L., *et al.* (2017). Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism*, 102(11), 3869-3903.

than one's sex assigned at birth. This is a vital distinction. While the diagnostic category of "gender identity disorder" would capture many cisgender children, the diagnostic category of "gender dysphoria," by definition, does not.[26] Of note, a recent study by Princeton professor Dr. Kristina Olson et al. found that the vast majority of prepubertal transgender children continued to identify as transgender over a five-year follow-up period.[27]

REGRET AMONG INDIVIDUALS RECEIVING MEDICAL TREATMENT FOR GENDER DYSPHORIA IS UNCOMMON

26. De-transition and transition regret are distinct concepts, and transition regret is uncommon. Given that de-transition has heterogeneous definitions, I caution against interpreting papers that use the term without clarifying how the phrase is being used.

27. The term "de-transition" is used inconsistently in literature and may sometimes refer to simply the stopping of medical interventions. But discontinuation of gender-affirming medical interventions does not always coincide with a change in understanding of one's gender identity or with transition-related regret. Rather, transgender adolescent patients who discontinue gender-affirming medical interventions may do so because of external factors (*e.g.*, pressure from family, societal rejection, harassment by peers). For example, a substantial number of currently identified transgender people (13.1%) have "de-transitioned" at some point in their life, with the

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[26] The desistance studies have also been criticized for a range of other methodological limitations. Olson, K.R. (2016). Prepubescent Transgender Children: What We Do and Do Not Know. *Journal of the American Academy of Child & Adolescent Psychiatry*, 55(3), 155-156.

[27] Olson, K. R., Durwood, L., Horton, R., *et al.* (2022). Gender Identity 5 Years After Social Transition. *Pediatrics*, 150(2):e2021056082. Additionally, while one may ask if a social transition increases likelihood of "persistence," another study from this group (Rae et al. *Psychological Sciences*) found that social transition does not increase gender incongruence. Rae JR, Gülgöz S, Durwood L, *et al.* (2019). Predicting Early-Childhood Gender Transitions. *Psychological Sciences* 30(5), 669-681.

majority (82.5%) citing external factors like family rejection, societal stigma, or harassment.[28] Given that these people *currently* identify as transgender, it highlights that many people who "de-transition" choose to transition again in the future.

28. Studies focused specifically on regret, as opposed to the broad heterogeneous category of "de-transition," indicate that regret is extremely rare. In 2018, Amsterdam's VUMC Center of Expertise on Gender Dysphoria published the rates of regret among their cohort of 6,793 transgender patients who had undergone gender-affirming medical and/or surgical interventions.[29] Among transgender women with gender dysphoria who underwent gender-affirming surgery, 0.6% experienced regret. Among transgender men with gender dysphoria who underwent gender-affirming surgery, 0.3% experienced regret. Several of those who experienced regret were classified as having "social regret" rather than "true regret," defined in the study as still identifying as transgender but deciding to reverse their gender-affirming surgery due to factors like "the loss of relatives [being] a large sacrifice." The study also reported that only 1.9% of adolescents who started pubertal suppression did not choose to go onto gender-affirming hormones. In a second study of 143 transgender adolescents who started pubertal suppression, five adolescents (3.5%) decided not to proceed with further gender-affirming medical treatments.[30] One of these

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[28] Turban, J.L., Loo, S.S., Almazan, A.N., & Keuroghlian, A.S. (2021). Factors Leading to "Detransition" Among Transgender and Gender Diverse People in the United States: A Mixed-Methods Analysis. *LGBT Health*, 8(4), 273-280.

[29] Wiepjes, C.M., Nota, N.M., de Blok, C.J., *et al.* (2018). The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in Prevalence, Treatment, and Regrets. *The Journal of Sexual Medicine*, 15(4), 582-590.

[30] Brik, T., Vrouenraets, L.J.J.J., de Vries, M.C., *et al.* (2020). Trajectories of Adolescents Treated with Gonadotropin-Releasing Hormone Analogues for Gender Dysphoria. *Archives of Sexual Behavior*, 49(7), 2611-2618.

adolescents noted that pubertal suppression helped them to better understand their gender identity, and they ultimately identified with their sex assigned at birth. One birth-assigned female had ongoing chest dysphoria but chose to live with a female gender expression regardless, though was dreading further breast development and menstruation. One stopped due to unspecified "psychosocial reasons" but continued to identify as transgender. One identified as gender non-binary and felt they no longer needed treatment. One came to identify with his sex assigned at birth. There was no indication that any of these adolescents *regretted* pubertal suppression; rather, this study shows that the treatment served its goal of allowing adolescents more time to better understand their gender identity before being assessed for additional treatment. Cases of initiating then discontinuing gender-affirming hormones like estrogen or testosterone appear to be uncommon, largely at the case report level.[31] In one of these case reports, a patient similarly noted that a trial of estrogen helped them to better understand their gender identity, which had evolved to non-binary, and they did not regret initiating estrogen therapy.[32] Though there have been scattered and difficult-to-confirm social media reports of people regretting gender-affirming medical care (as with any form of medical treatment), this must be considered in the context of the 1.4 million transgender people in the United States alone.[33] The largest study to date that aimed to identify people who specifically started then stopped gender-affirming medical interventions

[31] A case report is a publication in which clinicians report on what occurred with a single patient.

[32] Turban, J.L., Carswell, J., & Keuroghlian, A.S. (2018). Understanding Pediatric Patients Who Discontinue Gender-Affirming Hormonal Interventions. *JAMA Pediatrics*, 172(10), 903-904.

[33] Flores, A.R., Herman, J.L., Gates, G.J., *et al.* (2016). How Many Adults Identify as Transgender in the United States? The Williams Institute, UCLA School of Law. *Available at* https://williamsinstitute.law.ucla.edu/wp-content/uploads/Trans-Adults-US-Aug-2016.pdf.

identified 100 individuals from around the world.[34] 34% of participants were from outside the United States. In this study, the average age of having started any gender-affirming medical intervention was 21.9 years, suggesting that these individuals were primarily cared for in the adult model of care, not the pediatric model of care, the latter of which requires a comprehensive biopsychosocial mental health assessment designed to minimize regret rates. Among these participants who had discontinued gender-affirming hormones, 34% reported that transition was "a necessary part of their journey" (*i.e.*, important for coming to better understand themselves and their gender identity). 67.7% reported they were helped in some way by gender-affirming medical care. While it is important to ensure that people are adequately supported in the rare instances of stopping gender-affirming medical interventions,[35] it is essential to contextualize this small number of cases among the 1.4 million transgender people in the U.S. alone, as well as the complexities of their experiences, which do not universally indicate regret.

29. All treatments in medicine carry risks, benefits, and side effects. It is essential that parents, adolescents, and their doctors be able to work together to weigh these factors and choose a path forward that is *most likely* to improve a young person's health, including their mental health. If the government were to ban all medical treatments with potential adverse side effects or the possibility of regret, it would ban essentially of all medicine. As one example, the vast majority of people who take the antibiotic penicillin find that their infections resolve; however, a small number of people will experience Stevens-Johnson syndrome (SJS) or toxic epidermal necrolysis (TEN)

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[34] Littman, L. (2021). Individuals Treated for Gender Dysphoria with Medical and/or Surgical Transition Who Subsequently Detransitioned: A Survey of 100 Detransitioners. *Archives of Sexual Behavior*, 50(8), 3353-3369.

[35] Turban, J.L., Brady, C., & Olson-Kennedy, J. (2022). Understanding and Supporting Patients With Dynamic Desires for Gender-Affirming Medical Interventions. *JAMA Network Open*, 5(7): e2224722.

from the medication — rare and potentially fatal conditions in which the person's skin detaches.[36] Morality rates from SJS/TEN are as high as 50%. The cholesterol-lowering medication atorvastatin (known to many under the brand name Lipitor) is one of the most commonly prescribed medications in the U.S., given its potential to lower cholesterol and subsequently reduce the risk of a heart attack. However, a small number of people will experience rhabdomyolysis as a side effect — a potentially fatal form of muscle breakdown that can cause kidney damage. Though both these medications carry a serious risk of adverse side effects, they help the vast majority of people, and thus should not be—and are not — banned. The responsibility of the clinician is to inform patients about these risks, benefits, and potential side effects, and work with patients and families to identify the best course of action. Gender-affirming care is not unique in carrying risks, side effects, or the possibility of regret.

36 While there is undoubtedly a small number of people who start gender-affirming medical interventions and later stop them, many people stop medical interventions for reasons other than a change in transgender identification, and among those small minority, an even smaller minority appear to regret the treatment. As with all medical interventions, gender-affirming medical interventions cannot claim a 100% success rate. However, for the vast majority of adolescents, these interventions improve mental health. Accordingly, it is dangerous to take the only evidence-based treatment option away from families and physicians as they work together to examine existing evidence and their individual case to determine what pathway is most likely to result in favorable mental health outcomes for an adolescent.

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[36] Lee, E.Y., Knox, C., & Phillips, E.J. (2023). Worldwide Prevalence of Antibiotic-Associated Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis: A Systematic Review and Meta-analysis. *JAMA Dermatology*, 159(4), 384-392.

THE LEGISLATIVE FINDINGS FOR THE MEDICAL CARE BAN ARE FACTUALLY INCORRECT AND UNSUPPORTED BY THE RELEVANT LITERATURE

31. I have reviewed the legislative findings that accompanied the medical care ban. They contain numerous misstatements of the relevant literature regarding gender identity and gender dysphoria, as well as the scientific and medical evidence for the safety and efficacy of gender affirming medical care in adolescents. In addition to the general opinions offered above, I specifically address findings (C), (D), (E), (F), (G), (N), and (O) below.

32. As set forth in paragraphs 23-26 above, and contrary to legislative finding (C), the statement that "the vast majority of children who are gender nonconforming or experience distress at identifying with their biological sex come to identify with their biological sex in adolescence or adulthood, thereby rendering most medical health care interventions unnecessary" is extraordinarily misleading. As set forth in greater detail earlier in this declaration, prepubertal children are not candidates for gender-affirming medical interventions under current guidelines. Furthermore, once a transgender youth begins puberty (*i.e.*, the earliest time point at which a gender-affirming medical intervention would potentially be considered), it is extremely rare for them to later identify as cisgender.[37] Any study regarding prepubertal children and their likelihood of ultimately identifying as transgender should not be used to assess the medical interventions targeted by the medical care ban, namely, pubertal suppression and gender-affirming hormones.

[37] See Turban, J.L., de Vries, A.L.C., & Zucker, K. (2018). Gender Dysphoria and Gender Incongruence. In Martin A., Bloch M.H., & Volkmar F.R. (Editors): *Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook, Fifth Edition*. Philadelphia: Wolters Kluwer. This textbook chapter provides comments from the directors of two of the oldest and most established gender clinics in the world.

since none of these interventions are provided to prepubertal patients under current medical guidelines.[38]

33. Contrary to legislative finding (D), it is not the case that "Scientific studies show that individuals struggling with distress at identifying with their biological sex often have already experienced psychopathology, which indicates these individuals should be encouraged to seek mental health care services before undertaking any hormonal or surgical intervention." First, this statement implies a misrepresentation of the model of gender-affirming care for adolescent gender dysphoria. The current standards of care require a biopsychosocial mental health assessment prior to initiating gender-affirming medical interventions for minors.[39] As the WPATH Standards of Care note, this biopsychosocial assessment is often extended "for youth with more complex mental health presentations (e.g., complicating mental health histories), co-occurring autism spectrum characteristics, or an absence of experienced childhood gender incongruence."[40] Such mental health assessments exist to distinguish other mental health conditions from gender dysphoria and to determine if gender-affirming medical interventions may be appropriate or not. Second, as discussed above, while psychotherapy can be very helpful for adolescents with gender dysphoria to help explore their gender identity and address comorbid conditions (e.g., major depressive

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[38] Hembree, W.C., Cohen-Kettenis, P.T., Gooren, L., *et al.* (2017). Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *Journal of Clinical Endocrinology & Metabolism*, 102(11), 3869-3903.

[39] Coleman, E., Radix, A.E., Bouman, W.P., *et al.* (2022). Standards of Care for the Health of Transgender and Gender Diverse People, Version 8. *International Journal of Transgender Health*, 23(Suppl 1), S1-S259.

[40] *Id.*

disorder, generalized anxiety disorder), there are no evidence-based psychotherapy protocols that effectively treat gender dysphoria itself.

34. The legislative finding (E) that "Suicide rates, psychiatric morbidities, and mortality rates remain markedly elevated above the background population after inpatient gender reassignment surgery has been performed" is misleading. First, mental health improves following gender-affirming medical care for adolescents with gender dysphoria, an effect mediated by an increase in congruence between participants' gender identities and their physical bodies.[40] Second, transgender people face a range of stressors that affect their mental health, most prominently societal rejection based on being transgender. Though gender-affirming medical interventions improve mental health, they cannot eliminate societal discrimination, and thus even after intervention, many transgender people still suffer elevated rates of mental health problems compared to cisgender people.[42] Additionally, while gender-affirming medical interventions may improve mental health by improving certain aspects of gender dysphoria (e.g., improved voice dysphoria with testosterone), it cannot necessarily improve all domains of gender dysphoria (e.g., testosterone has minimal impact on chest tissue and thus generally does not relieve chest dysphoria). This reality of mental health challenges even with gender-affirming care is not a valid argument against the provision of gender-affirming care. To draw a simple analogy, I have many patients with depression and anxiety whose symptoms improve with psychiatric medications, but

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[40] Chen, D., Berona, J., Chan, Y.M., *et al.* (2023). Psychosocial Functioning in Transgender Youth after 2 Years of Hormones. *New England Journal of Medicine*, 388(3), 240-250.

[42] It is worth noting, however, that some studies of adolescents with gender dysphoria who received gender-affirming medical care while in very accepting communities had mental health outcomes on par with the general population. de Vries, A.L., McGuire, J.K., Steensma, T.D., *et al.*. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134(4), 696-704.

do not completely abate. This, of course, does not mean that the medications were not effective in improving symptoms, nor that we should ban these treatments. Legislative finding (D) appears to be a distorted reading of studies like Dhejne et al.'s study from 2011, which found that those who had gender-affirming surgery had a 19-fold increased odds of suicidality when compared to the general population.[43] That study is not evidence that gender-affirming care is ineffective or that it increases suicide risk. As the authors of that study explained in their discussion: "It is therefore important to note that the current study is only informative with respect to transsexual persons health after sex reassignment; no inferences can be drawn as to the effectiveness of sex reassignment as a treatment for transsexualism. In other words, the results should not be interpreted such as sex reassignment per se increases morbidity and mortality. Things might have been even worse without sex reassignment. As an analogy, similar studies have found increased somatic morbidity, suicide rate, and overall mortality for patients treated for bipolar disorder and schizophrenia. This is important information, but it does not follow that mood stabilizing treatment or antipsychotic treatment is the culprit."[44] Of note, a more recent study that compared those who accessed gender-affirming surgery to those who desired such surgeries but were unable to access them found that those who accessed surgery had lower odds of suicidality.[45]

35. Contrary to legislative finding (F), it is not the case that with respect to "puberty-blocking drugs" there is a "lack of any long-term longitudinal studies evaluating the risks and

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[43] Dhejne, C., Lichtenstein, P., Boman, M., *et al.* (2011). Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. *PLoS One*, 6(2):e16885.

[44] *Id.*

[45] Almazan, A.N., & Keuroghlian, A.S. (2021). Association Between Gender-Affirming Surgeries and Mental Health Outcomes. *JAMA Surgery*, 156(7), 611-618.

benefits of using these drugs for the treatment of such distress or gender transition." There are over a dozen studies evaluating the efficacy and effectiveness[46] of puberty blockers and gender-affirming hormones for the treatment of adolescents with gender dysphoria.[47] These studies can be roughly delineated into two categories: uncontrolled longitudinal studies and controlled cross-sectional studies. Uncontrolled longitudinal studies (*e.g.*, Chen et al. *New England Journal of*

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[46] Efficacy refers to studies looking at an intervention under "ideal circumstances" (e.g., in a research clinic), whereas effectiveness studies look at the impact of an intervention under "real world" conditions (*i.e.*, in the general community practice setting).

[47] Such studies include: de Vries, A.L., Steensma, T.D., Doreleijers, T.A., & Cohen-Kettenis, P.T. (2011). Puberty suppression in adolescents with gender identity disorder: a prospective follow- up study. *The Journal of Sexual Medicine*, 8(8), 2276-2283; de Vries, A.L., McGuire, J.K., Steensma, T.D., *et al.* (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134(4), 696-704; Costa, R., Dunsford, M., Skagerberg, E., *et al.* (2015). Psychological Support, Puberty Suppression, and Psychosocial Functioning in Adolescents with Gender Dysphoria. *The Journal of Sexual Medicine*, 12(11), 2206-2214; Allen, L.R., Watson, L.B., Egan, A.M., & Moser, C.N. (2019). Well-being and suicidality among transgender youth after gender-affirming hormones. *Clinical Practice in Pediatric Psychology*, 7(3), 302-311; Kaltiala, R., Heino, E., Työläjärvi, M., *et al.* (2020). Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria. *Nordic Journal of Psychiatry*, 74(3), 213-219; López de Lara, D., Pérez Rodríguez, O., Cuellar Flores, I., *et al.* (2020). Psychosocial assessment in transgender adolescents. *Anales de Pediatria (English Edition)*, 93(1), 41-48; van der Miesen, A.I.R., Steensma, T.D., de Vries, A.L.C., *et al.* (2020). Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared with Cisgender General Population Peers. *Journal of Adolescent Health*, 66(6), 699-704; Kuper, L.E., Stewart, S., Preston, S., *et al.* (2020). Body Dissatisfaction and Mental Health Outcomes of Youth on Gender-Affirming Hormone Therapy. *Pediatrics*, 145(4):e20193006; Turban, J. L., King, D., Carswell, J. M., & Keuroghlian, A. S. (2020). Pubertal suppression for transgender youth and risk of suicidal ideation. *Pediatrics*, 145(2):e20191725; Green, A.E., DeChants, J.P., Price, M.N., *et al.* (2021). Association of Gender-Affirming Hormone Therapy with Depression, Thoughts of Suicide, and Attempted Suicide Among Transgender and Nonbinary Youth. *Journal of Adolescent Health*, 70(4), 643-649; Turban, J.L., King, D., Kobe, J., *et al.* (2022). Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults. *PLoS One*, 17(1): e0261039; Tordoff, D.M., Wanta, J.W., Collin, A., *et al.* (2022). Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Gender-Affirming Care. *JAMA Network Open*, 5(2):e220978; Chen, D., Berona, J., Chan, Y.M., *et al.* (2023). Psychosocial functioning in transgender youth after 2 years of hormones. *New England Journal of Medicine*, 388(3), 240-250.

Medicine 2023[48] and deVries et al. *Pediatrics* 2014[49]) have examined mental health before and after gender-affirming medical interventions and found that mental health is improved after treatment. Controlled cross-sectional studies (e.g., van der Miesen et al. *Journal of Adolescent Health*[50] and Turban et al. *PLoS One*[51]) have compared those who accessed gender-affirming medical care to those who desired but did not access this treatment and found that those who accessed treatment had better mental health outcomes. These two types of study designs offer complementary information that make experts in this field confident regarding the mental health benefits of these treatments. The results of these studies are additionally supplemented by decades of clinical experience from experts around the world who care for adolescents with gender dysphoria who have likewise documented and shared the substantial clinical benefits that their adolescent patients with gender dysphoria have experienced from gender-affirming medical treatment.

36. With respect to legislative finding (G) regarding the absence of randomized controlled trials for the provision of hormone therapy to adolescents with gender dysphoria, there are many controlled cross-sectional studies and uncontrolled longitudinal cohort studies, both of which are well-accepted in medical research and often relied upon in medicine. Randomized

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[48] Chen, D., Berona, J., Chan, Y.M., *et al.* (2023). Psychosocial functioning in transgender youth after 2 years of hormones. *New England Journal of Medicine*, 388(3), 240-250.

[49] de Vries, A.L., McGuire, J.K., Steensma, T.D., *et al.* (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134(4), 696-704.

[50] van der Miesen, A.I.R., Steensma, T.D., de Vries, A.L.C., *et al.* (2020). Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared with Cisgender General Population Peers. *Journal of Adolescent Health*, 66(6), 699-704.

[51] Turban, J.L., King, D., Kobe, J., *et al.* (2022). Access to gender affirming hormones during adolescence and mental health outcomes among transgender adults. *PLoS One*, 17(1):e0261039.

controlled trials are not always feasible or ethical in medicine. It is true that randomized controlled trials provide valuable information and strong evidence of causation that other studies do not. Randomized controlled trials are not feasible in the realm of gender-affirming medical care for adolescent gender dysphoria in particular. Because of the existing body of literature linking gender-affirming medical care to improved mental health outcomes for adolescents with gender dysphoria, it would be extraordinarily difficult to recruit people to participate in studies, knowing they could be randomized to receive no treatment. Particularly for vulnerable and pediatric populations, it is not considered ethical to randomize patients to placebo treatments when there is substantial evidence that active treatment confers important benefits. Thus, a randomized controlled trial of gender-affirming medical care for adolescent gender dysphoria would be unlikely to be approved by an Institutional Review Board (IRB), the ethical boards at universities that decide if research is allowed to proceed.[52] Moreover, such a study could not be blinded because of the physical effects of the treatment: those in the control group for either pubertal suppression or hormone therapy would, based on their continued progress (or not) through endogenous puberty and based on their development of gender-affirming secondary sex characteristics (or not) would know whether they had been provided a placebo or the intervention. Additionally, there have been no randomized controlled trials of using psychotherapy alone to treat gender dysphoria, as the state seems to suggest.

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[52] Of note, an RCT was recently conducted in Australia among adults with gender dysphoria to examine the impact of testosterone therapy. Nolan, B.J., Zwickl, S., Locke, P., *et al.* (2023). Early Access to Testosterone Therapy in Transgender and Gender-Diverse Adults Seeking Masculinization: A Randomized Clinical Trial. *JAMA Network Open*, 6(9):e2331919. The RCT found that those randomized to immediate testosterone therapy had better mental health outcomes than those randomized to the clinic's regular waitlist. Given that minors are a vulnerable group that generally warrants stricter protection under IRB review, it is unlikely that such an RCT would be approved for adolescent patients.

37. For these reasons, as well as those listed throughout this declaration, legislative findings (N) and (O) are incorrect to the extent they claim there is a "lack of studies showing that the benefits of such extreme interventions outweigh the risks" or that the "risks of gender transition services far outweigh any benefit at this stage of clinical study on these services." The relevant literature is to the contrary.

CONCLUSION

38. In summary, gender-affirming medical care for adolescent gender dysphoria, when medically indicated, is supported by a substantial body of peer-reviewed scientific evidence that has been collected over more than a decade. Though these treatments, like all medical treatments, carry potential risks and side effects, these potential risks must be weighed against the benefits of treatment and the risks of not providing treatment. There is nothing anomalous about the risks and side effects of treatment for gender dysphoria that would warrant singling out this care for prohibition. It is essential that physicians be able to work with adolescents and their families to weigh potential benefits against potential risks and side effects and provide the care that is appropriate for a given adolescent and their family. Banning these medical interventions would leave physicians without any evidence-based treatments for adolescent gender dysphoria, which, when left untreated, has been linked to dramatic adverse mental health outcomes, including suicidality. For these reasons, all relevant major medical organizations (The American Medical Association, The American Academy of Pediatrics, The American Psychiatric Association, The American Academy of Child & Adolescent Psychiatry, The Endocrine Society, and The Pediatric Endocrine Society, to name a few) oppose bans on gender-affirming medical care for adolescents with gender dysphoria.

Jack Turban

JACK L. TURBAN, MD, MHS

Signed at:

Franklin Ohio

County

03/22/2024

Sworn to and subscribed before me this day of March, 2024

Notary Public

Theresa M Sabo
Commission # 2016-RE-619622
Electronic Notary Public
State of Ohio
My Comm Exp. Nov 28, 2028

Notarial act performed by audio-visual communication

EXHIBIT A

Jack Lewis Turban III MD MHS
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ACADEMIC APPOINTMENTS

University of California, San Francsisco School of Medicine San Francisco, CA. September 2022-Present
Assistant Professor of Child & Adolescent Psychiatry and Affiliate Faculty in the Philip R. Lee Institute for Health Policy Studies. Responsibilities include directing the Gender Psychiatry Program and serving as an attending psychiatrist in the adult gender and sexual minority clinic, and in the eating disorders clinic, as well as research focusing on the determinants of mental health among transgender and gender diverse youth and the teaching of medical students, residents, and fellows.

EDUCATION & TRAINING

Stanford University School of Medicine Palo Alto, CA July 2020-June 2022
Fellow in Child & Adolescent Psychiatry. Fellow in child and adolescent psychiatry. Research focused on pediatric gender identity and LGBTQ mental health. Served as administrative chief fellow 2021-2022.

Massachusetts General Hospital & McLean Hospital Boston, MA July 2017 – May 2020
Integrated Adult, Child, & Adolescent Psychiatry Resident. Resident physician in the integrated adult, child, and adolescent psychiatry program. Research focused on pediatric gender identity and LGBT mental health.

Yale School of Medicine New Haven, CT. August 2012- May 2017
Doctor of Medicine & Master of Health Science with honors. Clinical rotations included inpatient pediatrics, inpatient child psychiatry, inpatient adolescent psychiatry, residential adolescent psychiatry, psychiatric consult liaison service, clinical neuromodulation, neurology clinics, and neurosurgery. Completed award-winning masters' thesis as a Howard Hughes Medical Institute (HHMI) medical research fellow on evolving treatment paradigms for transgender youth.
Clerkship Grades: All Honors
USMLE: Step 1 (252), Step 2 (256)

Harvard University Cambridge, MA September 2007- May 2011
B.A. Neurobiology magna cum laude with a secondary in the Dramatic Arts. Coursework included clinical neuroscience, systems neurobiology, visual neuroscience, positive psychology, neurobiology of behavior, CNS regenerative techniques, neuroanatomy, vertebrate surgery, and extensive coursework in dramatic theory and practice. International study included Spanish language (Alicante, Spain), stem cell biology (Shanghai, China), and studying how visual art may be used as a window into the mechanisms of neural processing (Trento, Italy). Honors thesis completed at The Massachusetts Eye & Ear Infirmary studying inner-ear development and regeneration. GPA: 3.8/4.0

RESEARCH EXPERIENCE

The Fenway Institute Boston, MA 2017-Present
Post-doctoral Research Fellow. Currently using data from the National Transgender Discrimination Survey to determine the adult mental health correlates of recalled childhood experiences including exposure to conversion therapy and access to gender-affirming hormonal interventions. PIs: Timothy Wilens, Alex Keuroghlian, & Sari Reisner

Stanford Division of Child & Adolescent Psychiatry Palo Alto, CA 2020-2022
Post-doctoral Resaerch Fellow. Estabished the Stanford Evaluation of Gender Affirmation (SEGA) study, which examines the impact of gender-affirming medical and surgical interventions on the mental health of transgender and gender diverse youth. Mentors: Dr. David Hong & Dr. Tandy Aye

McLean Institute for Technology in Psychiatry Belmont, MA. 2017-2020
Post-doctoral Research Fellow. Conducted cross-sectional studies that examine the associations between geosocial "hook-up apps," internalizing psychopathology, and compulsive sexual behavior. Utilizing the TestMyBrain platform. PI: Laura Germine

Yale Program for Research on Impulsivity & Impulse Control Disorders New Haven, CT 2016-2019

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Pre-doctoral Research Fellow. Conducted a studies of US military veterans who had recently returned from deployment, studying rates and comorbidities of those veterans who exhibit compulsive sexual behavior facilitated by social media. PI: Marc Potenza MD/PhD

Yale Child Study Center New Haven, CT 2015-2017
Pre-doctoral Research Fellow. Conducted a study to evaluate pediatric attending and medical student knowledge regarding transgender pediatric patient care. Additionally studied participants' personal ethical views regarding pubertal blockade and cross-sex hormone therapy for adolescent patients. PI: Timothy VanDeusen MD

Yale Department of Dermatology New Haven, CT 2015-2016
HHMI Medical Research Fellow. Studied the potential molecular mediators of Langerhans Cell-mediated UVB-induced epidermal carcinogenesis. Techniques included transgenic mouse models of chronic UV exposure, epidermal sheet preparations, immunohistochemistry, confocal microscopy, flow cytometry, Bioplex analysis, quantitative PCR and tissue culture. PI: Michael Girardi MD

Yale Department Laboratory Medicine New Haven, CT 2012-2014
Pre-doctoral Research Fellow. Employed mass spectrometry to compare metabolite profiles of recurrent tumor versus radiation-induced necrosis following Gamma Knife Radiosurgery for brain metastases, working to identify novel biomarkers for non-invasive imaging techniques. PI: Tore Eid MD/PhD

Yale Department of Neurosurgery New Haven, CT 2012-2012
Pre-doctoral Research Fellow. Developed a database of patients who received gamma knife radiosurgery or whole brain radiation for the treatment of brain metastases. This database is designed to evaluate the relative risks of radiation-induced necrosis following these two treatment modalities. PI: Veronica Chiang MD

Eaton-Peabody Laboratory Cambridge, MA 2009-2011
Undergraduate Rearch Fellow. Worked at the Massachusetts Eye and Ear Infirmary laboratory, studying stem cells of the inner ear and working toward cochlear hair cell regeneration. PI: Albert Edge PhD

LEADERSHIP

UCSF Child & Adolescent Psychiatry Grand Rounds Committee San Francisco, CA. 2023-Present
Member. Works with with committee to select and work with grand rounds speakers for the weekly child and adolescent psychiatry grand rounds series.

UCSF Child & Adolescent Psychaitry Fellowship Selection Committee San Francisco, CA 2022-Present
Member. Conducts interviews for applications to the UCSF child and adolescent psychiatry fellowship training program, sits on selection committee, works on recruitment efforts.

The Upswing Fund 2020-Present
Scientific Advisory Board. Member of the scientific advisory board of a $15M charitable fund to support adolescent minority mental health during the COVID19 pandemic. Funded by Melinda Gates's Panorama Global.

Stanford Medicine Diversity Cabinet LGBTQ+ / Sexual and Gender Minority Subcommittee 2021-2022
Member. Working to improve Stanford School of Medicine in all aspects relevant to sexual and gender minorities including curriculum, clinical care, and employee support.

Stanford Pediatric Gender Journal Club 2021-2022
Founder. Organizing a monthly journal club focusing on the latest research relevant to the care of transgender and gender diverse youth.

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MGH Psychiatry Gender Lab Meetings Boston, MA 2019-2020
Founder. Established monthly lab meetings for those in the MGH psychiatry department to discuss ongoing research regarding transgender mental health.

Yale School of Medicine Cultural Competence Committee New Haven, CT 2012-2017
Chair. Worked with individual course directors to develop course material on cultural competence. Authored case studies on handling pediatric patient sexuality (Professional Responsibility Course), authored a pre-clinical lecture on LGBT healthcare (Ob/Gyn Module), and lectured on transgender pediatric patient care (Pediatrics Clinical Clerkship).

Dean's Advisory Committee on LGBTQ Affairs (Yale School of Medicine) New Haven, CT 2016-2017
Member. Served on the advisory committee to the Dean of Yale School of Medicine, advising on issues related to LGBTQ affairs.

Yale HIV Dermatology Roundtable New Haven, CT 2014-2017
Founder. Eighty percent of patients suffering from HIV face a dermatologic manifestation of their disease. Struck by these patients' experience of stigma, I organized a bi-monthly interdisciplinary roundtable to improve research, education, and clinical care in HIV dermatology. Interventions have included primary care provider training on the treatment of genital warts and improved referral systems for cutaneous malignancies.

Yale Gay & Lesbian Medical Association New Haven, CT 2013-2017
President. Led a group of medical students focused on supporting careers in medicine for LGBT individuals. Organized mixers with LGBT organizations from other graduate schools and with LGBT faculty. Coordinated trips to GLMA national conferences. Worked with the medical school administration to create an LGBT faculty advisor position.

VOLUNTEER WORK & ADVOCACY

American Academy of Child & Adolescent Psychiatry "Break the Cycle" 2017-2017
Event Coordinator. Worked with Dr. Andres Martin to coordinate a fundraising indoor cycling event for the AACAP *Break The Cycle* fundraising campaign to fight children's mental illness.

Yale Hunger & Homelessness Auction New Haven, CT 2012-2014
Logistics Co-Chair. Organized a group of ten students to coordinate entertainment, donations, and event logistics for the Yale annual charity auction. All proceeds for the auction go to support local charities.

Yale School of Medicine Admissions Committee New Haven, CT 2015-2017
Interviewer. Served as a full voting member of the admissions committee. Responsibilities include student interviewing, recruitment, and organizing LGBT-focused activities for admitted students.

Harvard College Admissions New Haven, CT 2012-2020
Interviewer. Interviewing students from the Boston area for admission to Harvard College.

SELECTED PEER REVIEWED PUBLICATIONS: ORIGINAL RESEARCH

Turban J.L., Dolotina B., Freitag T.M., King D., Keuroghlian A.S. Age of realization of transgender identity and mental health outcomes among transgender and gender diverse adults. *Journal of Adolescent Health.* 72(6): 852-859.

Turban J.L., Dolotina B., King D., Keuroghlian A.S. (2022) Sex assigned at birth ratio among transgender and gender diverse adolescents in the United States. *Pediatrics*. 150(3):e2022056567.

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Lewis, J. M., Monico, P. F., Mirza, F. N., Xu, S., Yumeen, S., **Turban, J. L.**, Galan A., & Girardi, M. (2021). Chronic UV radiation–induced RORγt+ IL-22–producing lymphoid cells are associated with mutant KC clonal expansion. *Proceedings of the National Academy of Sciences*, 118(37).

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Turban, J. L., Shirk, S. D., Potenza, M. N., Hoff, R. A., & Kraus, S. W. (2020). Posting Sexually Explicit Images or Videos of Oneself Online Is Associated With Impulsivity and Hypersexuality but Not Measures of Psychopathology in a Sample of US Veterans. *The Journal of Sexual Medicine*, *17*(1), 163-167.

Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020). Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *JAMA Psychiatry*, *77*(1), 68-76.

Acosta, W., Qayyum, Z., **Turban, J. L.**, & van Schalkwyk, G. I. (2019). Identify, engage, understand: Supporting transgender youth in an inpatient psychiatric hospital. *Psychiatric Quarterly*, 90(3), 601-612.

Turban, J. L., King, D., Reisner, S. L., & Keuroghlian, A. S. (2019). Psychological Attempts to Change a Person's Gender Identity from Transgender to Cisgender: Estimated Prevalence Across US States, 2015. *American Journal of Public Health*, 109(10), 1452-1454.

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Turban, J. L., Potenza, M. N., Hoff, R. A., Martino, S., & Kraus, S. W. (2017). Psychiatric disorders, suicidal ideation, and sexually transmitted infections among post-deployment veterans who utilize digital social media for sexual partner seeking. *Addictive Behaviors*, 66, 96-100.

Turban J. L.*, Lu, A. Y*., Damisah, E. C., Li, J., Alomari, A. K., Eid, T., ... & Chiang, V. L. (2017). Novel biomarker identification using metabolomic profiling to differentiate radiation necrosis and recurrent tumor following Gamma Knife radiosurgery. *Journal of Neurosurgery*, 127(2), 388-396.

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Kempfle, J. S., **Turban, J. L.,** & Edge, A. S. (2016). Sox2 in the differentiation of cochlear progenitor cells. *Scientific Reports*, 6, 23293.

SELECTED PEER REVIEWED PUBLICATIONS: COMMENTARY, REVIEWS, & PERSPECTIVES

Turban J.L., Anderson T.M., Spetz J. Gender Identity and Ethnoracial Disparities in Conversion Effort Exposure. American Journal of Public Health. [Invited Commentary, Accepted for Publication]

Turban, J.L., Dolotina, B., Freitag, T.M., King, D., Keuroghlian, A.S. (2023) Rapid-Onset Gender Dysphoria Is Not a Recognized Mental Health Diagnosis. Journal of Adolescent Health. 73(6): 1163-1164.

Lerario, M.P., Fusunyan, M., Stave C.D., Roldan, V., Keuroghlian, A.S., **Turban, J.L.,** Perez, D.L., Maschi, T., Rosendale,
N. (2023) Functional neurologic disorder and functional somatic syndromes among sexual and gender minority people: a scoping review. Journal of Psychosomatic Research. 174: 111491.

Lerario, M. P., Rosendale, N., Waugh, J. L., **Turban, J.L.,** & Maschi, T. (2023). Functional Neurological Disorder Among
Sexual and Gender Minority People. Neurologic Clinics. 41(4): 759-781.

Chen A, Cohen I.G., Kraschel K., **Turban J.L.**. Legal & Ethical Perspectives on Criminalization of Standard of Care Medical Practices. *Cell Reports Medicine*.

Turban J.L., Brady C., & Olson-Kennedy J. Understanding & Supporting Patients with Dynamic Desires for Gender-affirming Medical Interventions. *JAMA Network Open*.

Dolotina B. **& Turban J.L.** "Phantom Networks" Prevent Children & Adolescents from Obtaining the Mental Health Care They Need. *Health Affairs*. 41(7).

Turban J.L., Kamceva M, Keuroghlian A.S. Pharmacologic Considerations for Transgender and Gender Diverse People. *JAMA Psychiatry*. 79(6): 629-630.

Dolotina B. & **Turban J.L.**. (2022) A multipronged, evidence-based approach to improving mental health among transgender and gender diverse youth. *JAMA Network Open*. 5(2): e220926.

Turban J.L., Almazan A.N., Reisner S.L., Keuroghlian A.S. (2022) The importance of non-probability samples in minority health research: lessons learned from studies of transgender and gender diverse mental health. *Transgender Health*. [ePub ahead of print]

Turban J.L., Kraschel K.L., Cohen, G.C. (2021) Legislation to Criminalize Gender-affirming Medical Care for Transgender Youth. *JAMA*. 325(22), 2251-2252.

Liu M., **Turban J.L.**, Mayer K.H. (2021) The US Supreme Court and Sexual and Gender Minority Health. *American Journal of Public Health*. 111(7), 1220-1222.

Suto, D.J., Macapagal, K., **Turban, J.L.** (2021) Geosocial Networking Application Use Among Sexual Minority Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*. 60(4), 429-431.

Turban, J. L., Keuroghlian, A. S., & Mayer, K. H. (2020) Sexual Health in the SARS-CoV-2 Era. *Annals of Internal Medicine*. 173(5), 387-389.

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Suozzi, K., **Turban, J.L.,** & Girardi, M. (2020). Focus: Skin: Cutaneous Photoprotection: A Review of the Current Status and Evolving Strategies. *The Yale Journal of Biology and Medicine*, *93*(1), 55.

Malta, M., LeGrand, S., **Turban, J.L.**, Poteat, T., & Whetten, K. (2020). Gender-congruent government identification is crucial for gender affirmation. *The Lancet Public Health*. 5(4), e178-e179.

Turban J.L. (2019). Medical Training in the Closet. *The New England Journal of Medicine*, *381*(14), 1305.

Turban, J. L., & Keuroghlian, A. S. (2018). Dynamic gender presentations: understanding transition and" de-transition" among transgender youth. *Journal of the American Academy of Child and Adolescent Psychiatry*, 57(7), 451-453.

Turban, J. L., Carswell, J., & Keuroghlian, A. S. (2018). Understanding pediatric patients who discontinue gender-affirming hormonal interventions. *JAMA Pediatrics*, *172*(10), 903-904.

Turban, J. L. (2018). Potentially Reversible Social Deficits Among Transgender Youth. *Journal of Autism and Developmental Disorders*, 48(12), 4007-4009.

Turban, J. L., & van Schalkwyk, G. I. (2018). "Gender dysphoria" and autism spectrum disorder: Is the link real?. *Journal of the American Academy of Child & Adolescent Psychiatry*, *57*(1), 8-9.

Turban, J. L., & Ehrensaft, D. (2018). Research review: gender identity in youth: treatment paradigms and controversies. *Journal of Child Psychology and Psychiatry*, *59*(12), 1228-1243.

Turban J. L., Genel, M. (2017) Evolving Treatment Paradigms for Transgender Patients. *Connecticut Medicine*, 81(8), 483-486.

Turban, J., Ferraiolo, T., Martin, A., & Olezeski, C. (2017). Ten things transgender and gender nonconforming youth want their doctors to know. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(4), 275-277.

Turban, J. L. (2017). Transgender Youth: The Building Evidence Base for Early Social Transition. *Journal of the American Academy of Child and Adolescent Psychiatry*, 56(2), 101.

Turban J. L., Martin A. (2017) Book Forum: Becoming Nicole. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(1): 91-92.

TEXTBOOKS AND TEXTBOOK CHAPTERS

Forcier, M., Van Schalkwyk, G., **Turban, J. L.** (Editors). Pediatric Gender Identity: Gender-affirming Care for Transgender & Gender Diverse Youth. Springer Nature, 2020.

Challa M., Scott C., **Turban J.L.** Epidemiology of Pediatric Gender Identity. In Forcier, M., Van Schalkwyk, G., **Turban, J. L.** (Editors). Pediatric Gender Identity: Gender-affirming Care for Transgender & Gender Diverse Youth. Springer Nature, 2020.

Turban J.L., Shadianloo S. Transgender & Gender Non-conforming Youth. In Rey, J.M. (Editor): IACAPAP e-Textbook of Child and Adolescent Mental Health. Geneva. International Association of Child and Adolescent Psychiatry and Allied Professionals, 2018.

Turban, J. L., DeVries, A.L.C., Zucker, K. Gender Incongruence & Gender Dysphoria. In Martin A., Bloch M.H., Volkmar F.R. (Editors): Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook, Fifth Edition. Philadelphia: Wolters Kluwer 2018.

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INVITED GRAND ROUNDS PRESENTATIONS

Turban JL. Research Updates: Supporting the Mental Health of Transgender & Gender Diverse Youth, UCSF Child Psychiatry and Behavioral Sciences Grand Rounds, 2024.

Turban JL. Transgender Youth Mental Health. Maudsley Hospital / Kings College London Grand Rounds, 2023.

Turban JL. Resaerch Updates: Supporting the Mental Health of Transgneder and Gender Diverse Youth. Department of Behavioral Health, Wake Forest School of Medicine / Atrium Health, 2023.

Turban JL. Supporting the Mental Health of Transgender and Gender Diverse Youth. Child & Adolescent Psychiatry Grand Rounds, Long Island Jewish Medical Center / Zucker Hillside, 2023.

Turban JL. Suicidality in Sexual and Gender Minority Youth. Psychiatry Grand Rounds, Boston Children's Hospital, 2023.

Turban JL. Opinion Writing to Promote Public Health & Evidence-Based Public Policy. Medical Education Grand Rounds, The University of Vermont Larner College of Medicine, 2022.

Turban JL. Research Updates: Supporting the Mental Health of Transgender & Gener Diverse Youth. Division of Child & Adolescent Psychiatry Grand Rounds, Stanford University School of Medicine, 2022.

Turban JL. Supporting Transgender & Gender Diverse Youth: Research Updates & Treatment Paradigms. Department of Psychiatry Grand Rounds, University of Nebraska Medical Center, 2022.

Turban JL. Supporting the Mental Health of Transgener & Gender Diverse Youth. Department of Pediatrics, Division of Behavioral Health Grand Rounds, University of Utah, 2022.

Turban JL. Gender Diverse Youth: Treatment Paradigms & Research Updates. Psychiatry Grand Rounds, Thomas Jefferson University, 2021.

Turban JL. Supporting Gender Diverse Youth Throughout Development. Child Psychiatry Grand Rounds, Georgetown, 2021.

Turban JL. Understanding Pediatric Gender Identity through Childhood and Adolescence. Grand Rounds, Institute of Living, 2021.

Turban JL. Evolving treatment paradigms for transgender youth. Pediatric Grand Rounds, Albany Medical Center, 2021.

Turban JL. Evolving Treatment Paradigms for Transgender Youth. Psychiatry Grand Rounds, McLean Hospital (Harvard Medical School), 2021.

Turban JL. Einstein Psychiatry Grand Rounds: Evolving Treatment Paradigms for Transgender Youth. Psychiatry Grand Rounds, Einstein Medical Center, 2021.

Turban JL. COVID19 and Pediatric Mental Health. Pediatrics Grand Rounds, Stanford University School of Medicine, 2021.

Turban JL. Evolving Treatment Paradigms for Transgender Youth. Psychiatry Grand Rounds, Beth Israel Deaconess

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Medical Center (Harvard Medical School), 2020.

ADDITIONAL INVITED PRESENTATIONS

Turban JL. Supporting the Mental Health of Transgender & Gender Diverse Youth. West Virginia Rural Health Equity Summit, Wheeling, West Virginia, 2023.

Turban JL. Suicide Prevention for LGBTQ+ Youth. National Institues of Health, Bethesda, 2023.

Turban JL. NAMI LGBTQ+ Mental Health Roundtable Discussion. National Alliance on Mental Illness, San Francisco, 2023.

Turban JL. Supporting the Mental Health of Transgender & Gender Diverse Youth. United Nations NGO Committee on Mental Health, United Nations, 2023.

Turban JL. Research Updates: Gender-affirming Care for Transgender Youth. MUSC LGBTQ+ Health Equity Summit, Medical University of South Carolina, 2022.

Turban JL. Keynote: Supporting The Mental Health of Transgender & Gender Diverse Youth. Edythe Kurz Educational Institute Conference, Westchester, 2022.

Turban JL, Peters B, Olson-Kennedy J. Gender-Affirming Care: Through a Medical, Surgical, and Mental Health Lens. Critical Issues in Child & Adolescent Mental Health Conference, San Diego, 2022.

Turban JL. Improving Mental Health Outcomes for Transgender and Gender Diverse (TGD) Youth Through Gender-affirming Care. National LGBTQIA+ Health Education Center, The Fenway Institute, 2022.

Turban JL. Combatting anti-trans legislation through science, data, and writing. State of Queer Mental Health Conference by The Mental Health Association of San Francisco, Online, 2021.

Turban JL. Updates on LGBTQ Mental Health. Annual Psychiatric Times World CME Conference, Online, 2021.

Turban JL. Imbasciani LGBTQ Health Equity Lecture: Evolving Treatment Paradigms for Transgender and Gender Diverse Youth. University of Vermont Larner College of Medicine, Burlington, 2021.

Turban JL. The Emergence of Gender-affirming Care for Transgender & Gender Diverse Youth, United Nations NGO Committee on Mental Health, Oral Presentation, Online, 2021.

Turban JL. Keynote – Transgender & Gender Diverse Youth: Research Updates. Stony Brook Transgender Health Conference, Online, 2021.

Turban JL. Opinion Writing on Sensitive Topics. Harvard Media & Medicine Course, Live Lecture, Online, 2021.

Turban JL. Gender affirming care for transgender and gender diverse youth: what we know and what we don't. University of Texas Pride Health Institute, Oral Presentation, Online, 2020.

Turban JL. Q&A on Transgender Youth Mental Health. PEOPLE in Healthcare at University of Toledo, Oral Presentation, Online, 2020.

Turban JL, Pagato S, Gold J, Broglie J, Naidoo U, Alvarado A. Innovation of Student Mental Health during COVID19. Panel to the People, Oral Presentation, Online, 2020.

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Turban JL, Belkin B, Vito J, Campos K, Scasta D, Ahuja A, Harris S. Discussion on Abomination: Homosexuality and the Ex-Gay Movement. Panelist, The Association of LGBTQ+ Psychiatrists Virtual Session, Oral Presentation, Online, 2020.

Turban JL. Is Grindr affecting gay men's mental health? Oral Presentation, UCLA & AETC Coping with Hope, Online, Oral Presentation, 2020.

Turban JL, Hall TM, Goldenberg D, Hellman R. Gay Sexuality and Dating. Moderator, The Association of LGBTQ+ Psychiatrists Virtual Session, Oral Presentation, Online, 2020.

CONFERENCE PRESENTATIONS & ABSTRACTS

Turban JL. A Systematic Approach for Understanding Gender Identity Evolution. Annual Meeting of The American Academy of Child & Adolesent Psychiatry, Oral Presentation, Toronto, 2022.

Turban JL. Transgender Youth: Evolving Gender Identities and "Detransition." Annual Meeting of The American Academy of Child & Adolesent Psychiatry, Session Chair of Oral Symposium, Toronto, 2022.

Turban JL, Gold J, Hartselle S, Yen J. From The New York Times to the Big Screen: Communicating With the Public Through Opinion Writing, Publishing, Social Media, and Consulting for Film and TV. Annual Meeting of The American Academy of Child & Adolesent Psychiatry, Session Chair of Oral Symposium, Online, 2021.

Turban JL. Creating Change through Opinion Writing in Child & Adolescent Psychiatry. Annual Meeting of The American Academy of Child & Adolesent Psychiatry, Oral Presentation, Online, 2021.

Turban JL, Giedinghagen A, Janssen A, Myint M, Daniolos P. Transgender Youth: Understanding "De-transition," Non-linear Gender Trajectories, and Dynamic Gender Identities. Annual Meeting of The American Academy of Child & Adolesent Psychiatry, Session Chair of Oral Symposium, Online, 2021.

Turban JL. A framework for understanding dynamic gender identities through internal and external factors. Annual Meeting of The American Academy of Child & Adolescent Psychiatry, Oral Presentation, Online, 2021.

Turban JL, Geosocial networking application use among birth-assigned male adolescents. Annual Meeting of The American Academy of Child & Adolescent Psychiatry, Oral Presentation, Online, 2021.

Turban JL. LGBTQ Families and the US Supreme Court. Annual Meeting of The American Academy of Child & Adolescent Psychiatry, Oral Presentations, Online, 2021.

Turban JL, King D, Kobe J, Reisner SL, Keuroghlian AS. Access to Gender-affirming Hormones during Adolescence and Mental Health Outcomes among Transgender Adults. Annual Meeting of The American Academy of Child & Adolescent Psychiatry, Poster, Online, 2021.

Turban JL. Gender Identity Conversion Efforts: Quantitative Perspectives. Annual Meeting of The American Psychiatric Association, Oral Presentation, Online, 2021.

Turban JL. For Worse: Negative Aspects of Social Media for LGBT Youth. Oral Presentation, Annual Meeting of The American Academy of Child & Adolescent Psychiatry, Oral Presentation, Online, 2020.

Turban JL. Hookup App Use among Gay and Bisexual Males: Sexual Risk and Associated Psychopathology. Oral Presentation, Annual Meeting of The American Academy of Child & Adolescent Psychiatry, Online, 2020.

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Turban JL. Communicating with the Public: From The New York Times to The Big Screen. Oral Presentation, Annual Meeting of The American Academy of Child & Adolescent Psychiatry, Online, 2020.

Turban JL, McFarland C, Walters O, Rosenblatt S. An Overview of Best Outpatient Practice in the Care of Transgender Individual. Oral Presentation, Annual Meeting of the American Psychiatric Association, Philadelphia, 2020. [Accepted, but cancelled due to COVID19]

Turban JL, Lakshmin P, Gold J, Khandai C. #PsychiatryMatters: Combating Mental Health Misinformation Through Social Media and Popular Press. Oral Presentation, Annual Meeting of the American Psychiatric Association, Philadelphia, 2020. [Accepted, but cancelled due to COVID19]

Turban JL. The Pen and the Psychiatrist: Outreach and Education Through the Written Word. Oral Presentation, Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Chicago, 2019.

Turban JL. For Better and For Worse: Gender and Sexuality Online, Oral Presentation, Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Chicago, 2019.

Turban JL. Gender Diverse Young Adults: Narratives and Clinical Considerations, Oral Presentation, Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Chicago, 2019.

Turban JL. Transgender Youth: Controversies and Research Updates, Oral Presentation, Annual Meeting of the American Psychiatric Association, San Francisco, 2019.

Turban JL, Beckwith N, Reisner S, Keuroghlian A. Exposure to Conversion Therapy for Gender Identity Is Associated with Poor Adult Mental Health Outcomes among Transgender People in the U.S. Poster Presentation, Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Seattle, 2018.

Shirk SD, **Turban JL**, Potenza M, Hoff R, Kraus S. Sexting among military veterans: Prevalence and correlates with psychopathology, suicidal ideation, impulsivity, hypersexuality, and sexually transmitted infections. Oral Presentation, International Conference on Behavioral Addictions, Cologne, Germany, 2018.

Turban JL. Gender Identity and Autism Spectrum Disorder. Oral Presentation, Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Washington D.C., 2017.

Turban JL. Tackling Gender Dysphoria in Youth with Autism Spectrum Disorder from the Bible Belt to New York City. Oral Presentation, Annual Meeting of the American Academy of Child & Adolescent psychiatry, Washington D.C., 2017.

Turban JL. Affirmative Protocols for Transgender Youth. Oral Presentation, Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Washington D.C., 2017.

Turban, JL. Evolving Management of Transgender Youth. Oral Presentation, Klingenstein Third Generation Foundation Conference, St Louis, 2017.

Turban, JL, Potenza M, Hoff R, Martino S, Kraus S. Clinical characteristics associated with digital hookups, psychopathology, and clinical hypersexuality among US military veterans. Oral Presentation, International Conference on Behavioral Addictions, Haifa, Israel, 2017.

Lewis J, Monaco P, **Turban JL**, Girardi M. UV-induced mutant p53 ketatinocyte clonal expansion dependence on IL-22 and RORγT. Poster, Society of Investigative Dermatology, Portland, 2017.

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Turban JL, Winer J, Encandela J, Boulware S, VanDeusen T. Medical Student Knowledge of and Attitudes toward Transgender Pediatric Patient Care. Abstract, Gay & Lesbian Medical Association, St Louis, 2016.

Turban JL, Lu A, Damisah E, Eid T, Chiang V. Metabolomics to Differentiate Radiation Necrosis from Recurrent Tumor following Gamma Knife Stereotactic Radiosurgery for Brain Metastases. Oral Presentation, 14th Annual Leksell Gamma Knife Conference, New York City, 2014

Turban JL, Lewis J, Girardi M. UVB-induced HMGB1 and extracellular ATP increase Langerhans cell production of IL-23 implicated in ILC3 activation. Poster, Society of Investigative Dermatology, Scottsdale, 2016

Turban JL, Lewis J, Girardi M. Characterization of cytokine pathways associated with Langerhans cell facilitation of UVB-induced epidermal carcinogenesis. Poster, American Society of Clinical Investigation, Chicago, 2016.

Lewis J, **Turban JL**, Girardi M, Michael Girardi. Langerhans cells and UV-radiation drive local IL22+ ILC3 in association with enhanced cutaneous carcinogenesis. Poster, Society of Investigative Dermatology, Scottsdale, 2016.

Sewanan L, Zheng D, Wang P, Guo X, Di Bartolo I, Marukian N, **Turban JL**, Rojas-Velazques D, Reisman A. Reflective Writing Workshops Led By Near Peers During Third-Year Clerkships: A Safe Space for Solidarity, Conversation, and Finding Meaning in Medicine. Poster & Workshop, Society of General Internal Medicine, New Haven and Hollywood, 2016.

AWARDS & HONORS

Top Peer Review Service, Annals of Internal Medicine (2022)
Stanford Child & Adolescent Psychiatry Chief Fellow (2021-2022)
Wasserman Award for Advocacy in Children's Mental Health (2021)
Top Manuscript of The Year - *Pediatrics* (2020)
American Psychiatric Association Child & Adolescent Psychiatry Fellowship (2019-2021)
Ted Stern Scholarship and Travel Award (2019)
Editor's Pick for Best Clinical Perspectives Manuscript – *Journal of The American Academy of Child & Adolescent Psychatry* (2018)
SciShortform Project: Best Shortform Science Writing, Columns & Op-Eds (2018)
Ted Stern Scholarship and Travel Award (2018)
Medaris Grant (2018)
Editor's Pick for Best Clinical Perspectives Manuscript – *Journal of The American Academy of Child & Adolescent Psychatry* (2017)
United States Preventative Health Services Award for Excellence in Public Health (2017)
NBC Pride 30 Innovator (2017)
Ferris Thesis Prize, Yale School of Medicine (2017)
Parker Prize, Yale School of Medicine (2017)
Howard Hughes Medical Institute Medical Research Fellowship (2015-2016)
American Academy of Child and Adolescent Psychiatry Life Members Mentorship Grant (2016)
Student Scholarship, Gender Conference East (2016)
Farr Award for Excellence in Research (2016)
Yale Office of International Medical Education Grant, Buenos Aires, Argentina (2016)
Yale Office of International Medical Education Grant, VU Medical Center, The Netherlands (2016)
Yale Summer Research Grant (2012)
AIG International Scholar, Harvard College (2007-2011)
Harvard International Study Grant, Alicante, Spain (2008)
David Rockefeller International Study Grant, Shanghai, China (2009)

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PROFESSIONAL MEMBERSHIPS & COMMITTEES

American Medical Association, Member
American Psychiatric Association, Member
American Academy of Child & Adolescent Psychiatry, Member
American Psychiatry Association, Council on Communications
American Academy of Child & Adolescent Psychiatry, Media Committee
American Academy of Child & Adolescent Psychiatry, Chair of Subcomittee on Interfacing with the Media
World Professional Association for Transgrender Health, Member
US Professional Association for Transgender Health, Member
US Professional Association for Transgender Health, Research Committee
Athlete Ally, Affiliate Scholar
Psychiatric Times, Editorial Board
Alpha Omega Alpha (AOA) Honor Medical Society, Member
NCAA Committee on Competitive Safeguards and Medical Aspects of Sports, Member

ACADEMIC JOURNAL SERVICE & AD HOC PEER REVIEW

PLoS One, Academic Editor
JAACAP, Contributing Editor
JAACAP, Guest Editor
JAMA, Peer Reviewer
JAMA Pediatrics, Peer Reviewer
JAMA Psychiatry, Peer Reviewer
JAMA Network Open, Peer Reviewer
Annals of Internal Medicine, Peer Reviewer
Pediatrics, Peer Reviewer
Journal of the American Academy of Child & Adolescent Psychiatry, Peer Reviewer
JAACAP Open, Peer Reviewer
Journal of Child Psychology and Psychiatry, Peer Reviewer
Journal of Adolescent Health, Peer Reviewer
Academic Psychiatry, Peer Reviewer
Journal of Autism and Developmental Disorders, Peer Reviewer
American Journal of Public Health, Peer Reviewer
Perspectives on Psychological Science, Peer Reviewer
Transgender Health, Peer Reviewer
Journal of Clinical Medicine, Peer Reviewer
Brain Sciences, Peer Reviewer
Social Science & Medicine, Peer Reviewer
Sexual Health, Peer Reviewer
Women, Peer Reviewer

EXHIBIT B

BIBLIOGRAPHY

Achille, C., Taggart, T., Eaton, N.R., *et al.* (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: preliminary results. *International Journal of Pediatric Endocrinology*, 2020(8), 1-5.

Allen, L.R., Watson, L.B., Egan, A.M., & Moser, C.N. (2019). Well-being and suicidality among transgender youth after gender-affirming hormones. *Clinical Practice in Pediatric Psychology*, 7(3), 302-311.

Almazan, A.N., & Keuroghlian, A.S. (2021). Association Between Gender-Affirming Surgeries and Mental Health Outcomes. *JAMA Surgery*, 156(7), 611-618.

American Academy of Child & Adolescent Psychiatry (2018). Conversion Therapy. *Available at* https://www.aacap.org/AACAP/Policy_Statements/2018/Conversion_Therapy.aspx.

American Medical Association (2018). Health Care Needs of Lesbian, Gay, Bisexual and Transgender and Queer Populations. H-160.991. *Available at* https://policysearch.ama-assn.org/policyfinder/detail/gender%20identity?uri=%2FAMADoc%2FHOD.xml-0-805.xml.

Brik, T., Vrouenraets, L.J.J.J., de Vries, M.C., *et al.* (2020). Trajectories of Adolescents Treated with Gonadotropin-Releasing Hormone Analogues for Gender Dysphoria. *Archives of Sexual Behavior*, 49(7), 2611-2618.

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