

STATE OF OHIO
Executive Department

OFFICE OF THE GOVERNOR

Columbus

I, Mike DeWine, Governor of the State of Ohio, do hereby appoint Maninder Singh Kalra, M.D., Ph.D., from Mason, Warren County, Ohio, as a Member of the Sinclair Community College Board of Trustees for a new term beginning July 27, 2020 and ending at the close of business July 9, 2025, replacing Maninder Singh Kalra, whose term expired.



IN WITNESS WHEREOF, I have hereunto subscribed my name and caused the Great Seal of the State of Ohio to be affixed, at Columbus, this 27th day of July in the year of our Lord, Two Thousand and Twenty.

Mike DeWine

Mike DeWine
Governor

CURRICULUM VITAE

Maninder Kalra, M.D., Ph.D.

CONTACT INFORMATION:

Office address: Dayton Children's Hospital, Division of Sleep Medicine
One Children's Plaza, Dayton, Ohio 45404-1815

Cell: 513-289-6741

Email: maninderkalra@gmail.com

EDUCATION:

Undergraduate: Premedical (Biology), Punjab University, India ((1983-1985)

Medical School: Punjab University, India (1986-1991)

Graduate studies: M.S. Epidemiology, University of Cincinnati (2001-2002)

Doctoral studies: Ph.D. Epidemiology, University of Cincinnati (2005-2008)

Residency: Pediatrics, Dayanand Medical College and Hospital, Punjab University, India
(1991-1992)
Pediatrics, St Joseph's Children's Hospital, New Jersey (1993-1996)

Fellowship: Pediatric Pulmonary, Cincinnati Children's Hospital, (2000- 2003)

Board Certification:
American Board of Sleep Medicine, 2004

American Board of Pediatrics, Certification in Pediatric Pulmonology 2005,
Recertification 2016

American Board of Pediatrics, Certification in Sleep medicine 2007, 2017

HOSPITAL AND ADMINISTRATIVE APPOINTMENTS:

1996-1997 Staff Physician, General Pediatrics, St Joseph's Children's Hospital, New Jersey

1997-2000 General Pediatrics Faculty, St. Joseph's Children's Hospital, New Jersey

2001-2004 Medical Staff-General Pediatrics, Cincinnati Children's Hospital

2003-2008	Assistant Professor, Department of Pediatrics, University of Cincinnati
2008-2015	Director Pediatric Sleep, Columbus Sleep Consultants, Ohio
2009-2015	Medical Director, Midwest Sleep Medicine Consultants
2016-Current	Associate Professor, Department of Pediatrics, Wright State University
2016-Current	Medical Director, Sleep Center, Dayton Children's Hospital, Ohio
2018-Current	Adjunct faculty, School of Graduate Studies, Wright State University
2018-Current	Faculty, KNOESIS center, Wright State University
2018-Current	Chief, Division of Sleep Medicine, Dayton Children's Hospital

COMMITTEE AND BOARD APPOINTMENTS:

2013-2016	Board Member, Ohio Respiratory Care Board
2013-2016	Board Member, Mallory Wilson Center, Miami University, Ohio
2017-Current	Board of Trustees Member, Sinclair Community College, Dayton, Ohio
2018-Current	Research Steering Committee, Dayton Children's Hospital

SOCIETY MEMBERSHIPS:

2002	Fellow, American Thoracic Society
2003	Fellow, American Academy of Sleep Medicine
2016	Western Ohio Pediatric Society

HONORS AND AWARDS:

1996	James Morill Resident Continuity clinic award, St Joseph's Children's Hospital, Paterson, New Jersey
2005	Lugaresi Young Investigator Award, World Association of Sleep Medicine, Berlin
2006	Dean's Clinical Research Scholars Award, University of Cincinnati, Ohio
2007	Chair, Session on Pediatric Sleep Disordered Breathing, World Congress of Sleep Medicine

2008 Chair, Session on Pediatric Sleep Disordered Breathing, American Thoracic Society Annual Conference

2016 Co-Chair, Session on Obesity Research, Wright State University

MANUSCRIPTS:

Beebe D, Wells C, Jeffries J, Chini B, **Kalra M**, Amin R. *Neuropsychological effects of pediatric obstructive apnea*. Journal of the International Neuropsychological Society 2004; 10 (7) 962-975.

Amin R, Kimball T, **Kalra M**, Jeffries J, Carroll J, Bean J, Daniels S. *Left ventricular function in children with sleep-disordered breathing*. The American Journal of Cardiology 2005; 95(6):801-4.

Kalra M., Kimball TR, Daniels SR, LeMasters G, Willging PJ, Rutter M, Amin RS. *Structural Cardiac Changes as a Predictor of Respiratory Complications after Adenotonsillectomy for Obstructive Breathing during Sleep in Children*. Sleep Medicine 2005; 6: 241-5.

Kalra M., Buncher R., Amin R. *Asthma as a Risk Factor for Postoperative Respiratory Complications after Adenotonsillectomy in Children with Obstructive Breathing during Sleep*. Ann Allergy 2005; 94: 549-52.

Kalra M., Inge T, Garcia V, Daniels S, Lawson L, Amin R. *Obstructive sleep apnea in extremely overweight adolescents undergoing bariatric surgery*. Obes Res. 2005; 13: 1175-9.

Kalra M., Amin RS. *Pulmonary management of the patient with muscular dystrophy*. Pediatr Ann. 2005; 34: 539-45.

Kalra, M. and Inge T. *Effect of Bariatric Surgery on Obstructive Sleep Apnea in Children*. Pediatric Respiratory Reviews 2006; 7:260-67.

Kalra M., LeMasters G., Bernstein D., Wilson K., Levin L., Cohen A., Amin R. *Atopy as a Risk Factor for Habitual Snoring at Age 1 Year*. CHEST 2006; 129; 942-946.

Kalra M., Biagini J., Bernstein D., Stanforth S., Burkle J., LeMasters G. *Effect of Asthma on the Risk for Obstructive Sleep Apnea Syndrome in Atopic Females*. Ann Allergy 2006; 97:231-35.

Kalra M., Donnelly L., McConnell K., O'Brien K., Sandhu J., Johnson J., Amin R. *Determination of Respiratory Phase during Acquisition of Airway Cine MR Images*. Pediatric Radiology 2006; 36(9):965-69.

McCarty Statham M., Elluru R., Buncher R., **Kalra M.** *Adenotonsillectomy for Obstructive Sleep Apnea Syndrome in Young Children: Prevalence of Pulmonary Complications*. Arch Otolaryngol Head Neck Surg. 2006; 132: 476-480.

Kalra, M. and Chakraborty R. Genetic Susceptibility to Obstructive Sleep Apnea in the Obese Child. *Sleep Medicine* 2007; 8(2):169-75.

Kumar S. and **Kalra, M.** Obesity and Obstructive Sleep Apnea. *Minerva Pneumologica* 2007; 46N3:183-190.

Kalra M., Bernstein D., Biagini J., Ryan P., LeMasters G. *Allergic Rhinitis may be Important in Snoring Infants (Author reply)*. *Chest* 2007;131:330-331.

Kalra, M., Kumar S., Chakraborty R., Inge T. Association of Obstructive Sleep Apnea with Hyperinsulinemia in Adolescents with Severe Obesity. *Minerva Pneumologica* 2007; 46N3:151-156.

Ameet S Daftary, Mark Crisanti, **Kalra M**, Brenda Wong, Amin R . *Effect of long-term steroids on cough efficiency and respiratory muscle strength in patients with Duchenne muscular dystrophy*. *Pediatrics* 03/2007; 119(2):e320-4.

Bradley L Fricke · M Bret Abbott · Lane F Donnelly · Bernard J Dardzinski · Stacy A Poe · **Kalra M** · Amin R · Robin T Cotton · *Upper Airway Volume Segmentation Analysis Using Cine MRI Findings in Children with Tracheostomy Tubes*. *Korean Journal of Radiology* 12/2007; 8(6):506-11.

Thomas H Inge · Meg Zeller · Carroll Harmon · Michael Helmrath · Judy Bean · Avani Modi · Mary Horlick · **Kalra M** · Stavra Xanthakos · Rosemary Miller · Rachel Akers · Anita Courcoulas. *Teen-Longitudinal Assessment of Bariatric Surgery: Methodological features of the first prospective multicenter study of adolescent bariatric surgery*. *Journal of Pediatric Surgery* 12/2007; 42(11):1969-71.

M. M. Rutter, S. R. Rose, **M. Kalra**, Wong B. *Growth hormone may improve growth, neuromuscular and pulmonary function in Duchenne muscular dystrophy*. *Neuromuscular Disorders* 10/2008; 18(9):826.

Amin R, Leonard Anthony, Virend Somers, Matthew Fenchel, Keith McConnell, Jenny Jefferies, Paul Willging, **Kalra M**, Stephen Daniels. *Growth velocity predicts recurrence of sleep-disordered breathing 1 year after adenotonsillectomy*. *American Journal of Respiratory and Critical Care Medicine* 04/2008; 177(6):654-9.

Carolina V A Guimaraes, **Kalra M**, Lane F Donnelly, Sally R Shott, Kelly Fitz, Saroj Singla, Amin R. *The frequency of lingual tonsil enlargement in obese children*. *American Journal of Roentgenology* 04/2008; 190(4):973-5.

Mihai Mihaescu, Shanmugam Murugappan, Ephraim Gutmark, Lane F Donnelly, **Kalra M**. *Computational modeling of upper airway before and after adenotonsillectomy for obstructive sleep apnea*. *The Laryngoscope* 03/2008; 118(2):360-2.

Kalra M, Prodipto Pal, Ritesh Kaushal, Amin R, Lawrence M Dolan, Kelly Fitz, Sunil Kumar, Xiaohua Sheng, Saurav Guha, Joydeep Mallik, Ranjan Deka, Ranajit Chakraborty . *Association Of ApoE genetic variants with obstructive sleep apnea in children*. Sleep Medicine 03/2008; 9(3):260-5.

Mihai Mihaescu, Shanmugam Murugappan, **Kalra M**, Sid Khosla, Ephraim Gutmark. *Large Eddy Simulation and Reynolds-Averaged Navier-Stokes modeling of flow in a realistic pharyngeal airway model: an investigation of obstructive sleep apnea*. Journal of Biomechanics 02/2008; 41(10):2279-88.

Mary McBride, Larry Markham, Linda Cripe, **Kalra M**, Amin R, Janaka Wansapura, William Gottliebson. *Relationship of structural and functional cardiac abnormalities to respiratory status in Duchenne Muscular Dystrophy*. Journal of Cardiovascular Magnetic Resonance 01/2008.

Mohannad M Mannaa, **Kalra M**, Brenda Wong, Aliza P Cohen, Amin R. *Survival probabilities of patients with childhood spinal muscle atrophy*. Journal of clinical neuromuscular disease 04/2009; 10(3):85-9.

Go Miyano, **Kalra M**, Thomas H Inge . *Adolescent paraplegia, morbid obesity, and pickwickian syndrome: outcome of gastric bypass surgery*. Journal of Pediatric Surgery 04/2009; 44(3):e41-4

Goutham Mylavarapu, Shanmugam Murugappan, Mihai Mihaescu, **Kalra M**, Sid Khosla, Ephraim Gutmark . *Validation of computational fluid dynamics methodology used for human upper airway flow simulations*. Journal of biomechanics 07/2009; 42(10):1553-9.

David J Birnkrant, Katharine M D Bushby, Amin R, John R Bach, Joshua O Benditt, Michelle Eagle, Jonathan D Finder, **Kalra M**, John T Kissel, Anastassios C Koumbourlis, Richard M Kravitz. *The respiratory management of patients with duchenne muscular dystrophy: a DMD care considerations working group specialty article*. Ped Pulmonology 08/2010; 45(8):739-48.

Hemant Sawnani, Shanmugam Murugappan, Ephraim Gutmark, Lane F Donnelly, Amin R, Goutham Mylavarapu, Mihai Mihaescu, Sid Khosla, **Kalra M**. *Influence of gender on pharyngeal airway length in obese adolescents*. The Annals of otology, rhinology, and laryngology 12/2010; 119(12):842-7.

Mathew Ednick, Brenda Wong, Thomas Inge, Marianne Knue, **Kalra M**. *Post-operative respiratory outcomes using a standard extubation protocol after elective gastrostomy tube placement in pediatric patients with spinal muscular atrophy type 1*. Journal of pediatric neurology: 07/2015; 06(03):249-252.

Ravinuthala A, Gupta S, **Kalra M**. *Obstructive Sleep Apnea Severity and PAP Compliance in Atrial Fibrillation Patients*. J Sleep Med Disord 2016 3(4): 1056.

U Jaimini, T Banerjee, W Romine, K Thirunarayan, A Sheth, and **Maninder Kalra**.
Investigation of an Indoor Air Quality Sensor for Asthma Management in Children. IEEE
Sensors letters. Vol 1, No.2, April 2017.

Jaimini U, Thirunarayan K, **Kalra M**, Venkataraman R, Kadariya D, Sheth A, "*How Is My Child's Asthma?*" *Digital Phenotype and Actionable Insights for Pediatric Asthma*. JMIR
Pediatr Parent 2018;1(2):e11988, DOI: 10.2196/11988 (PMCID: PMC6469868, NIHMSID:
NIHMS1006255, PMID: 31008446)

Venkataramanan R, Thirunarayan K, Jaimini U, Kadariya D, Yip HY, **Kalra M**, Sheth A,
"*Determination of Personalized Asthma Triggers from Multimodal Sensing and Mobile
Application*". JMIR Pediatr Parent JMIR Pediatr Parent 2019;2(1):e14300 DOI: 10.2196/14300

Schuler C, Biagini Myers J , Kerckmar C, Pilipenko V , Kroner J, Simmons J, Austin S,
Gunkelman S, Ross K, McCoy K, **Kalra M**, Ruddy J, Martin L & Gurjit K. Khurana Hershey ,
MD, PhD. *Weighing in on asthma: Insights on BMI, magnesium, and hospitalizations from the
Ohio Pediatric Asthma Repository*. Journal of Asthma, 2019

MENTORING:

AASM faculty mentoring:

2019 Christine De Santos, Sao Paulo , Brazil

Graduate students:

2016-2017 Masters in Mechanical Engineering-Wesley Zloza.

2017-2019 Masters in Computer Science (3 students)- Revathy Venkaatraman, Vaikunth
Sridharan and Dipesh Kadariya.

2017-current Doctorate in Computer Science. Utkarshini Jamini.

Member of thesis committee for graduate students:

2017 Masters in Mechanical Engineering. Modeling and Analysis of Human Airway
Dynamics utilizing data obtained from Cine MRI.

2018 Masters in Computer Science. kHealthDash: Knowledge-enabled Personalized
DASHboard for Asthma Management.

2019 kBot: Knowledge-enabled Personalized Chatbot for Asthma Self-Management.

ABSTRACTS AND PRESENTATIONS:

2001. *Tetany in a Patient with Cystic Fibrosis on once a day Aminoglycoside
Therapy*. North American Cystic Fibrosis Conference, Fellows Session.

2002. *Predictors of Postoperative Respiratory Complications in Children with Snoring
Undergoing Tonsillectomy and/or Adenoidectomy*. Associated Professional Sleep
Societies 16th annual meeting, Poster Session.

2003. *Left Ventricular Hypertrophy in Children with Obstructive Breathing During Sleep who
Develop Postadenotonsillectomy Respiratory Complications*. American Thoracic Society
annual meeting, Poster Session.

2003. *Sleep Disordered Breathing in Rubinstein Taybi Syndrome*. International

- Family Conference, Cincinnati, Ohio.
2004. *Prevalence of Snoring in 1-Year-Old Children at Risk for Atopy*. American Thoracic Society annual meeting, Poster Session.
 2004. *Prevalence of Sleep Disorders among Urban Indian Seven-year-old Children*. Associated Professional Sleep Societies 18th annual meeting, Poster Session.
 2004. *Obstructive Sleep Apnea in Obese Children*. Sleep Grand Rounds. Kosairs Children's Hospital.
 2004. *Asthma, Allergic Rhinitis, and Obstructive Sleep Apnea in Children*. Invited lecture, Division of Allergy & Immunology at Cincinnati Children's.
 2004. *Pulmonary Complications in Obese Children*. Respiratory Grand Rounds. Cincinnati Children's Hospital.
 2005. *Obstructive Sleep Apnea in Severely Obese Adolescents: Effect of Bariatric Surgical Intervention*. American Thoracic Society annual meeting, Oral Presentation. Session on Obesity Related Sleep Disordered Breathing.
 2005. *Atopy as a Risk Factor for Habitual Snoring at Age 1 Year*. Second Annual Respiratory Disease Young Investigators' Forum, Boston, Massachusetts.
 2005. *Prevalence of Snoring Among Young Adult Females with Atopy*. CHEST 71st annual international scientific assembly of the American College of Chest Physicians (ACCP), Montreal, Canada.
 2005. *Respiratory Protocol for Neuromuscular Patients*. The 16th Annual Current Trends in Neonatal and Pediatric Care Conference, Cincinnati, Ohio.
 2005. *Obstructive Sleep Apnea Syndrome in Children*. Pediatric Grand Rounds, St. Joseph's Regional Medical Center, Patterson, New Jersey.
 2005. *Childhood Obstructive Sleep Apnea Syndrome*. Division of Epidemiology & Biostatistics Seminar, Cincinnati, Ohio.
 2006. *OSA and Insulin Resistance in Adolescents with Severe Obesity*. American Thoracic Society annual meeting, Poster Session.
 2006. *Natural Course of Habitual Snoring in a Population-Based Birth Cohort*. American Thoracic Society annual meeting, Poster Session.
 2006. *Regional Adiposity and Obstructive Sleep Apnea in Obese Adolescents*. Associated Professional Sleep Societies 20th annual meeting, Poster Session.
 2006. *Craniofacial Risk Factors for OSA in Obese Adolescents with Obstructive Sleep Apnea*. Associated Professional Sleep Societies 20th annual meeting, Poster Session.
 2006. *Sleep Disorders in Children*. RESPICON 2006- the 18th National conference of the Indian Academy of Pediatrics- Respiratory Chapter and First Indo-Europe Seminar on Pediatric respiratory Diseases.
 2007. *Obstructive Sleep Apnea in Children: Association with Leptin Gene Polymorphisms and their interaction with APOE Polymorphisms*. American Thoracic Society annual meeting, Poster Session.
 2007. *Habitual Snoring in Young Children: Longitudinal follow up of a birth cohort*. American Thoracic Society annual meeting, Poster Session.
 2008. *Gender and Airway Length in Obese Adolescents*. Associated Professional Sleep Societies 22th annual meeting, Poster Session.
 2008. *Use of Pediatric Sleep Questionnaire to Predict OSA Related Outcomes in Adolescents with Severe Obesity Undergoing Gastric Bypass Surgery*. Associated Professional Sleep Societies 22th annual meeting, Poster Session.

2008. *Natural History of Habitual Snoring in Young Children*: Longitudinal follow up of a birth cohort. American Thoracic Society annual meeting, Poster Session.
2013. *Home Sleep Testing*. Ohio Sleep and Pulmonary Diagnostics Conference.
2014. *Ethics and Legal Issues for Respiratory Professionals*. Ohio Sleep and Pulmonary Diagnostics Conference.
2015. *Pulmonary Management of Neuromuscular Disorders*. Ohio Sleep and Pulmonary Diagnostics Conference.
2016. *Obstructive Sleep Apnea Severity and PAP Compliance in Atrial Fibrillation Patients*. Associated Professional Sleep Societies 30th annual meeting, Poster Session.
2016. *Obesity and OSA in children*. Obesity Seminar at Dayton Children's Hospital
2016. *Sleep Research*. Session on Obesity Research, Wright State University
2016. *Pulmonary Management of Neuromuscular Disorders in Children*. Resident Conference at Dayton Children's Hospital
2017. *Use of Upper Airway Cine MRI to Develop Personalized Treatment for Obstructive Sleep Apnea in Obese Children*. American Thoracic Society annual meeting, Poster Discussion Session.
2017. *Neck Circumference Percentile As a Predictor of Obstructive Sleep Apnea in Children*. American Thoracic Society annual meeting, Poster Session.
2018. *Correlating Multimodal Signals with Asthma Control in Children using kHealth Personalized Digital Health system*. American Thoracic Society annual meeting May 2018, Poster Session.
2018. *Feasibility Of Recording Sleep Quality And Sleep Duration Using Fitbit In Children With Asthma*. Associated Professional Sleep Societies annual meeting June 2018, Poster Session.
2018. *kHealthDash: Knowledge-enabled Personalized DASHboard for Asthma Management*. American College of Allergy and Asthma annual meeting November 2018, Poster Session.

RESEARCH:

Dayton Children's Hospital foundation research grant
10/2017-Current

Kalra(PI)

Computational Fluid Dynamics Modeling of Airway MRI to Predict Obstructive Sleep Apnea Surgical Outcomes in Obese Children.

Computational simulation of biological phenomenon using anatomically accurate models that are amenable to physiologic manipulation is being utilized to develop an individualized surgical treatment plan for pediatric OSA. As an outcome of the proposed research, clinicians will have a new tool to preoperatively predict outcomes of common surgical interventions for OSA.

1R01HD087132-01 (NIH/PTCIB)
07/2016 – 06/2019

Sheth (PI)

kHealth: Semantic Multisensory Mobile Approach to Personalized Asthma Care: With increasing adoption of mobile devices, social media and low-cost sensors, an unprecedented amount of health related data is being collected. We are developing knowledge empowered

algorithms to make sense of this data deluge to help develop better asthma control strategies, and evaluating it with a cohort of 200 patients.

Ohio Pediatric Asthma Repository

Hershey (PI)

07/2014-06/2018

Ohio Pediatric Asthma Repository (OPAR) was initiated in 2012 to (1) build a comprehensive biorepository linking clinical, demographic, adherence, environmental, and health outcomes data with biologic specimens; and (2) to compare effectiveness of treatment strategies employed at Ohio children's hospitals for acute asthma exacerbation. As part of OPAR, children admitted for treatment of asthma exacerbation at any of the 6 major Ohio children's hospitals are consented and prospectively enrolled in the repository, which now includes over 3,500 children.

General Clinical Research Center MO1 RR 08084-08

Kalra (PI)

08/04-07/07

Assessment of Pharyngeal Collapsibility in Obese Children with OSA
by Volume Segmentation of Cine MR Data

Scholars Grant in Sleep Medicine

Kalra (PI)

06/05-06/07

American Academy of Sleep Medicine/Pfizer
Visceral adiposity in Obese Adolescents with Obstructive Sleep Apnea

U01 DK072493-04S1 (ARRA Funds – Sleep Study)

Inge (PI)

09/05-08/08

Adolescent Bariatrics: Assessing Health Benefits & Risks

To address important knowledge gaps pertaining to outcomes of adolescent bariatric surgery, the Teen-LABS study ([NCT00474318](#)) was designed to collect standardized prospective pre- and postoperative clinical and laboratory data longitudinally on adolescents undergoing weight loss surgery at five U.S. centers.

GOVERNOR'S APPOINTMENTS TO BOARDS AND COMMISSIONS

Date: 7/27/2020

Name of Appointee: Dr. Maninder Singh Kalra, M.D., Ph.D.

Address: 4118 Maxwell Dr.
Mason, OH 45040
Warren County
(H) - 5133989605
(W) - 9376415004
(M) - 5132896741

Name of Commission: Sinclair Community College Board of Trustees

Contact: Adam Murka, Director of Public Information
444 West Third Street
Dayton, OH 45402
(937) 321-5400

Term Begins: 7/10/2020

Term Ends: 7/9/2025

Party Affiliation: Republican

Senate Confirmation: Appointed by the Governor, confirmed by the Senate

Financial Disclosure: Confidential disclosure required

Vice: Maninder Singh Kalra