CURRICULUM VITAE

ARPITA VYAS, M.D., M.B. Ch. B., DCH (UK)

Education:

Sheffield University, United Kingdom (UK)

MB ChB (Equivalent to M.D.)
D. Ch (Royal College of Pediatrics)

MRCPCh Part1 and 2 (Royal College of Pediatrics)
Pediatrics Residency (Case Western Reserve University)

Board Certification in Pediatrics in 2008 (American Board of Pediatrics)

Board Certification in Pediatric Endocrinology in 2012 (American Board of Pediatrics)

Appointments:

2011- Present Pediatric Endocrinologist, Assistant Professor, MSU

2010-2011: Physician Researcher, Faculty, Pediatric Endocrinology

Washington University, St Louis

2008 - 2010: Senior Pediatrics Endocrinology Fellow,

Washington University School of Medicine, St. Louis

2006-2008: Residency, Dept. Of Pediatrics, Rainbow Babies Children's

Hospital, Case Western Reserve University

2005-2006: Pediatric Endocrinology Fellow

Washington University School of Medicine, St. Louis

2004-2005: Senior House Staff,

University College of London Affiliates Hospitals, UK

2002-2004: Senior House Staff, Birmingham University Hospital, UK

2001-2002: House Staff, Sheffield University Hospital, UK

Grants:

2012-2014 NIH K12 Grant, Role of GLP-1 and anti-inflammatory agents in the cardiovascular abnormalities associated with Polycystic Ovarian Syndrome, BIRCWH Grant, USD 100,000/yr

Grant Application Submitted:

- 2014 R01: Developmental origin of cardiac disease
- 2014 R21: Inflammation targeting in cancer (PI: Dinesh Vyas, MD)
- 2012 K08 Mentored research grant: Effect of Incretin hormone on glucose and calcium transport in the failing heart
- 2012 Development of Acute Care and Trauma Grant for Western Rajasthan: 1.5 Million INR
- 2012 DoD Breast Cancer Research Idea Award: USD 1 Million
- 2011 DoD DMRDP Military Infections Diseases Applied Research Award USD 2 Million
- 2011 Strategic Partnership Grant, Proteosomes Inhibitor and Sepsis, MSU, USD 800k
- 2011 NIH R21/R33 NIH Grant, Proteosomes Inhibitor and Sepsis USD 1 Million
- 2011 DoD Grant: Prehospital and Enroute Care in Shock Trauma Care USD 3 Million

Honors and Achievements:

- 2014: Academic achievement award: College of human medicine MSU
- 2013: Howard Hughes Teaching Award: Pediatric Residency Program
- 2012: Board certification in Pediatric Endocrinology
- 2010: Selected as top 3 research abstract for Washington University Pediatric Research day
- 2008: Board certification in Pediatrics
- 2007: Award for excellence in pediatric care (Rainbow Babies and Children Hospital)
- 1997: Medical School Selection Committee, Sheffield University
- 1991: Duke of Edinburgh award (bronze)
- 1990: Certificate of excellence for completions of the general education in Spanish

Educational Accomplishments:

- 2012 Board certification in Pediatric Endocrinology
- 2008 Board certification in Pediatrics, USA
- 2004 Diploma in Child Health, Royal College of Pediatrics and Child Health, UK
- 2003 Step 1 Membership exam, Royal College of Pediatrics and Child Health, UK
- 2004 Step 2 Membership exam, Royal College of Pediatrics and Child Health, UK

Medical License:

Missouri State - Full License

Michigan - Full License

Research Interest and future projects:

Study energy utilization in a cardiac failure

Cardiovascular dysfunction in Polycystic Ovarian syndrome

Perinatal health and postnatal outcomes

Hormonal changes in sepsis and effect of Proteasome

Micronutrients Deficiency and its contribution to heart disease

International Social Pediatrics

Memberships:

- 2013: Endocrine Society
- 2013: American association of clinical endocrinologist
- 2009: British Society for Pediatric Endocrinology & Diabetes
- 2009: European Society for Pediatric Endocrinology
- 2009: New York Academy of Science
- 2005: Lawson Wilkins Pediatric Endocrine Society
- 2004: American Academy of Pediatrics
- 2004: American Physiological Society
- 2001: British Medical Association

Accomplishments in position of responsibility:

2014: Chair: selection committee: Pediatrics Infectious Disease Faculty

2014: Lead: Academic program review East Lansing campus, Department of Pediatrics MSU

2013-ongoing: Elected member for the pediatric executive committee, MSU

2012-ongoing: Pediatric research day committee member with active involvement, MSU Social Medicine, Recruited patients for immunization, Health camp

2006: Polio Immunization Camp, New Delhi, India

Publications:

Saadeh Y, **Vyas A**, Vyas D. Breast cancer and theranostic nanoparticle, Journal of Nanoscience and Nanotechnology, Volume 14, Number 1, January 2014, pp. 913-923(11)

Vyas D, Castro P, Saadeh Y, Gandhi S, Lopez N, Vyas A. Gastrointestinal diseases and theranostic Nanoparticle, Journal of Biomedical Nanotechnology, 2014 (in press)

Lopez N, Gandhi S, Castro P, Chaturvedi L, **Vyas A**, Vyas D. A second-generation proteasome inhibitor is more potent than Doxorubicin modulating IL-6, pSTAT-3 and NF-kB activity in triple negative breast cancer. Scientific Reports **(Nature)** (Responded with minor revision)

Joshi SS, **Vyas AK**, Vyas D, Kalla R: Reclassifying inflammatory bowel disease with capsule endoscopy in children J Pediatr (Rio J). 2013;89: 514--5.

Dinesh Vyas, Heidi E L'Esperance, **Arpita Vyas**: Stool therapy may become a preferred treatment of recurrent Clostridium difficile? *World J Gastroenterol* 2013 August 7; 19(29): 4635-4637

Vyas AK, Lauren Flessner, Maria Payne, Patrick Y. Jay, Paul W. Hruz: Saxagliptin Improves Glucose Homeostasis but fails to improve survival in a murine model of dilated cardiomyopathy Cardiovascular Endocrinology September 2012

Vyas D, **Vyas A**. Time to detoxify medical literature from Guidelines overdose, *World Journal of Gastroenterology*, 2012 18(26):3331-3335

Vyas D., Garthe C, Vyas A. Limitations of Current Timing and Frequency of Screening Colonoscopy and possible future direction. J Laparoendosc Adv Surg Tech A. 2012 Dec 28.

Vyas D, Phil K, S Kavuturu, **Vyas A**. Benign Mesothelioma as a rapidly developing Giant Abdominal Cyst. W Journal of Surgical Oncology, 2012 Dec 20;10(1):277.

Vyas D, L. S. Chaturvedi, Mohammad Eldakdouki, Marc Basson, **Arpita Vyas**, P. S. Mohankumar, Xuefei Huang. Novel theranostic nanoparticle use for efficient administration of Doxorubicin in breast cancer cell. *Journal of Women's Health* (Larchmt) (abstract). 2012 Oct;21(10):1008.

Vyas A, White NH: Case of Hypercalcemia Secondary to Hypervitaminosis A in a 6-Year-Old Boy with Autism. Case Reports in Endocrinology, Volume 2011 (2011), Article ID 424712

Remedi MS, Agapova SE, Vyas AK, Hruz PW, Nichols CG: Acute Sulfonylurea Therapy at Disease Onset Can Cause Permanent Remission of KATP-Induced Diabetes. Diabetes, 2011 Aug 3.

Vyas A, K-C Yang, D Woo, PY. Jay, PW Hruz: Exenatide improves glucose homeostasis and prolongs survival in a murine model of dilated cardiomyopathy. PLoS One. 2011 Feb 17;6(2):e17178

Vyas A, White N. Case of hypercalcemia secondary to hypervitaminosis a in a 6-year-old boy with autism. Case Reports in Endocrinology Volume 2011, PMID: 22937283

Vyas A, Koster J, Anatoly Tzekov, PW Hruz: Effects of the HIV Proteas Inhibitor Ritonavir in GLUT4 knockout mice . JBC Nov. 2010 : 285 : 36395-36400

Shepherd S, **Vyas A**, Arbelaez A: Pediatric Endocrinology. In Susan Dusenbery (ed.) pp 198-220. Washington manual of Pediatrics, St. Louis 2009

Vyas A, K-C Yang, D Woo, PY. Jay, PW Hruz: Beneficial effects of exenatide on glucose homeostasis and survival in ritonavir-treated mice with advanced dilated cardiomyopathy. *Antiviral therapy 2009 14 suppl 2:A7*

Book Chapter

Vyas, AK, Menon RK, 44.2.2: Growth hormone deficiency and resistance and 44.2.3: Growth hormone therapy Section 44 on Disorders of the Endocrine Gland Postgraduate textbook of Pediatrics (2014)

Vyas A Adrenal Cancer, In Vyas D. (ed.). Comprehensive Textbook of Surgery, ISBN: 978-93-5025-052-5 Jaypee Brothers.

Vyas A, Thyroid Diseases. In Vyas D. (ed.). Comprehensive Textbook of Surgery, ISBN: 978-93-5025-052-5Jaypee Brothers.

Manuscripts in preparations:

Hoang V¹, Jiangjiang Bi¹.³, MohanKumar SM², **Vyas AK¹**: Liraglutide improves hypertension and metabolic perturbation in a rat model of polycystic ovarian syndrome (Submited to PLOS one)

Arpita K Vyas¹, Vanessa Hoang¹, Jiangjiang Bi¹, Vasantha Padmanabhan²: Developmental programming: Prenatal testosterone alters metabolic signaling and upregulates markers of cardiac stress in the left ventricular tissue of a sheep model of polycystic ovarian syndrome.

Justin Smith, Vyas A: Cardiovascular health in the pediatric population with polycystic ovarian syndrome

International/National Research Meetings Presentation

2010: Improved Glucose Homeostasis Prolongs Survival in a Murine Model of Advanced Dilated Cardiomyopathy. Invited for **podium presentation** at Pediatric Academic Society meeting in *Vancouver* May 1-4 2010

2010: Beneficial effect of exenatide on glucose homeostasis and survival in ritonavir treated mice with advanced dilated cardiomyopathy **Podium presentation:**11 th international workshop on Adverse Drug reactions and Co-morbidities in HIV

2009: Differential effects of exenatide and captopril on glucose homeostasis and survival in a murine model of dilated cardiomyopathy. **Podium presentation:** Pediatric Midwest Society Conference 2009 Chicago IL

2009: Search for mutations in the PDP1 gene as a cause of pyruvate dehydrogenase phosphatase deficiency: **Podium presentation**: Pediatric Science day at Case Western Reserve University, 2009, Cleveland, OH

2004: 5 week retrospective study comparing the morbidity an mortality of 28-32 wk neonates in the neonatal unit in AIIMS, India to that in Jessops Hospital, Sheffield *Feb'2001*. **Podium presentation:** National Conference in Neonatology (Guwhati, India).

Poster presentation (National /International meetings):

2014: Altered cardiac insulin signaling in a sheep model of Polycystic Ovarian Syndrome: Endocrine Society

2014: Glucagon like peptide-1 agonist improves glucose homeostasis in a rat model of Polycystic Ovarian Syndrome: Society of gynecological investigation Florence, Italy

2012: Saxagliptin Improves Glucose Tolerance but Fails to Improve Survival in a Murine model of Dilated Cardiomyopathy. : American Diabetes Association:

Invited Talks:

- 2014: Cardiovascular consequences in PCOS: Pediatric research meeting Department of Pediatrics MSU
- 2013: Pediatric Board Review section for Michigan University campuses: Pediatric Endocrinology
- 2013: Precocious puberty: "To bloom or not to bloom that is the question" at the annual meeting American association of clinical endocrinologist
- 2013: Cardiovascular alteration in PCOS: Research rounds Endocrinology MSU
- 2012: Pediatric Grand Rounds: Current Era of Childhood Diabetes Mellitus: Recent Advances and Future Prospects Sparrow Hospital and MSU
- 2012: Pediatric Board Review section for Michigan University campuses: Pediatric Endocrinology

2012: Endocrine seminars University Of Michigan: Cardiac energy metabolism and role of incretin hormones.