

## CURRICULUM VITAE

**Date:** October 21, 2013

### PERSONAL INFORMATION:

Name: Robert M. Lowe, M.D., Ph.D.  
Citizenship: U.S.A.

**RANK/TITLE:** Assist. Prof., Division of Pediatric Rheumatology 2011  
**Department:** Pediatrics  
**Business Address:** The Children's Hospital of Alabama (CHA)  
Dept. of Pediatrics, Div. of Rheumatology  
1601 4th Avenue South, Suite 210  
Birmingham, AL 35233  
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### EDUCATION:

University of Pennsylvania	B.A. in Biology (with Distinction)	1992
National Institutes of Health	Pre-doctoral Fellow	1993
University of Washington	Ph.D. in Cellular and Molecular Biology	2003
University of Washington	M.D.	2004

### LICENSURE:

Alabama, (MD.30911), active

### BOARD CERTIFICATION/ELIGIBILITY:

2011	Pediatric Rheumatology, (ABP)
2008	American Board of Pediatrics (ABP) – General Pediatrics Certification
2004, 2010	Pediatric Advanced Life Support (PALS)

### POSTDOCTORAL TRAINING:

2007-2010	Fellow in Pediatric Rheumatology, Rainbow Babies and Children's Hospital, Cleveland, OH
2005-07	Resident in Pediatrics, Rainbow Babies and Children's Hospital, Cleveland, OH
2004-05	Intern in Pediatrics, Rainbow Babies and Children's Hospital, Cleveland, OH

### ACADEMIC APPOINTMENTS:

Apr. 2011 – Jan. 2013	Instructor, Department of Pediatrics, University of Alabama School of Medicine
Jan. 2013 – present	Assistant Professor, Department of Pediatrics, University of Alabama School of Medicine

**AWARDS/HONORS:**

2009, 2010      Fellows-In-Training Travel Scholarship (FITT), American College of Rheumatology  
1995-97        ARCS Fellowship recipient

**PROFESSIONAL SOCIETIES:**

American Association of Immunologists, (2011-present)  
American Association for the Advancement of Science, (1994-2004, 2007-present)  
American Academy of Pediatrics, Pediatric Rheumatology Section, (2009-present)  
American College of Rheumatology, including Pediatric Rheumatology Section (2009-present)  
Childhood Arthritis and Rheumatology Research Alliance (CARRA) (2011-present)  
Alabama Society for Rheumatic Diseases (ASRD) (2011-present)

**UNIVERSITY ACTIVITIES:**

**(University of Washington)**

Student member of School of Medicine admissions committee, 1998-2003

**MAJOR RESEARCH INTERESTS:**

1. Epigenetic factors regulating disease activity in pediatric and adult systemic lupus erythematosus
2. Role of FoxP3 in HIV infection in regulatory T cells (Tregs)
3. Gene therapy for X-linked Hyper-IgM Syndrome (CD154 deficiency)

**TEACHING EXPERIENCE:**

**(University of Washington)**

Tutor, School of Medicine, 1995-2002

Teaching Assistant, Undergraduate Biology Courses, 1996-97

**(Columbia Review)**

Lecturer, MCAT Biology Section, 1996-98

**MENTORING OF TRAINEES:**

**UNDERGRADUATE STUDENTS:**

Mentor for Greg Sund, University of Washington undergraduate, 1996-98

Mentor for Kati Lotfi, University of Washington undergraduate, 1997-98

**Grants**

UAB Pediatrics Children's Health Foundation/Kaul Pediatric Research Institute, "Gene Replacement Therapy for the Treatment of X-Linked Hyper-IgM Syndrome", Principal Investigator: Dr. Robert Lowe, 2012-2014, \$60,000

Creative and Novel Ideas in HIV Research (National Institutes of Health Center for AIDS Research), "Role of FoxP3 in Blocking Transcriptional Activation of HIV-1 LTR in Treg Cells", Principal Investigator: Dr. Robert Lowe, 2012-2014, \$300,000

UAB Pediatrics CHRC, "Epigenetic Regulation of the CD154 Gene in Children and Adults with Lupus", Principal Investigator: Dr. Robert Lowe, 2012-2015, \$300,000

Arthritis Foundation, "Epigenetic Regulation of CD154 Gene Expression", Principal Investigator: Dr. Robert Lowe, 2012-2014, \$100,000

Pediatric Research Loan Repayment Program (National Institutes of Health). Principle Investigator: Dr. Robert Lowe, 2013-2015, \$32,500

## **BIBLIOGRAPHY:**

### **MANUSCRIPTS ALREADY PUBLISHED [citations]:**

1. Mullen, C.A.; Coale, M.M.; **Lowe, R.**; Blaese, R.M. 1994. Tumors expressing the cytosine deaminase suicide gene can be eliminated in vivo with 5-fluorocytosine and induce protective immunity to wild type tumor. *Cancer Res.* 54(6):1503-6. [**194 citations**]
2. Mullen, C.A.; Petropoulos, D.; **Lowe R.M.** 1996. Treatment of microscopic pulmonary metastases with recombinant autologous tumor vaccine expressing interleukin 6 and *Escherichia coli* cytosine deaminase suicide genes. *Cancer Res.* 56(6):1361-6. [**35 citations**]
3. Lotfi, K.; Sund, G.; **Lowe, R.**; Graham, J.; Landin-Olsson, M.; Kockum, I.; Deeb, S.; Lernmark, A. 1997. The beta cell glucokinase promoter variant is an unlikely risk factor for diabetes mellitus. Diabetes Incidence Study in Sweden (DISS). *Diabetologia.* 40(8):959-62. [**8 citations**]
4. Undlien, D.E.; Kockum, I.; Ronningen, K.S.; **Lowe, R.**; Saanjeevi, C.B.; Graham, J.; Lie, B.A.; Akselsen, H.E.; Lernmark, A.; Thorsby, E. 1999. HLA associations in type 1 diabetes among patients not carrying high-risk DR3-DQ2 or DR4-DQ8 haplotypes. *Tissue Antigens.* 54(6):543-51. [**25 citations**]
5. **Lowe, R.M.**; Graham, J.; Sund, G.; Kockum, I.; Landin-Olsson, M.; Schaefer, J.B.; Torn, C.; Lernmark, A.; Dahlquist, G. 2000. The length of the CTLA-4 microsatellite (AT)<sub>N</sub>-repeat affects the risk for type 1 diabetes. Diabetes Incidence in Sweden Study Group. *Autoimmunity.* 32(3):173-80. [**25 citations**]
6. Graham, J.; Hagopian, W.A.; Kockum, I.; Li, L. S.; Sanjeevi, C.B.; **Lowe, R.M.**; Schaefer, J.B.; Zarghami, M.; Day, H.L.; Landin-Olsson, M.; Palmer, J.P.; Janer-Villanueva, M.; Hood, L.; Sundkvist, G.; Lernmark, A.; Breslow, N.; Dahlquist, G.; Blohme, 2002. Genetic effects on age-dependent onset and islet cell autoantibody markers in type 1 diabetes. *Diabetes.* 51(5):1346-55. [**101 citations**]
7. Singer, N.G.; Tomanova-Soltys, I.; **Lowe, R.** 2008. Sjogren's syndrome in childhood. *Curr Rheumatol Rep.* 10(2):147-55. [**16 citations**]
8. **Lowe, R.M.**; Hashkes, P.J. 2008. Growing pains: a non-inflammatory pain syndrome in children. *Nature Clin Practice Rheum.* 4(10):542-9. [**8 citations**]
9. Zhang, M.; Clausell, A.; Robinson, T.; Yin, J.; Chen, E.; Johnson, L.; Weiss, G.; Sabbaj, S.; **Lowe, R.M.**; Wagner, F.H.; Goepfert, P.A.; Kutsch, O.; Cron, R.Q. 2012. Host factor transcriptional regulation contributes to preferential expression of HIV type 1 in IL-4-producing CD4 T cells. *J Immunol.* 189(6):2746-57. [**2 citations**]
10. Donnithorne, K.J.; Read, R.W.; **Lowe, R.**; Weiser, P.; Cron, R.Q.; Beukelman, T. 2013. Retinal vasculitis in two pediatric patients with systemic lupus erythematosus: a case report. *Pediatr Rheumatol Online J.* 11(1):25.
11. Weiser, P.; Johnson, S.; **Lowe, R.M.**; Cron, R.Q. 2013. Tempomandibular joint arthritis in juvenile dermatomyositis and pediatric mixed connective tissue disease. *Ann. Pediatr. Rheumatol.* 2(2):91-94.

### **MANUSCRIPTS SUBMITTED BUT NOT YET ACCEPTED:**

1. **Lowe, R.M.**; Genin, A.; Orgun, N.; Daggan, A.; Cron, R.Q. IL-15 prolongs CD154 expression on human CD4 T cells via STAT5 binding to the CD154 transcriptional promoter. *Genes Immun., provisionally accepted.*

**PUBLISHED ABSTRACTS:**

**Poster Exhibits:**

1. **Lowe, R.M.;** Kean, T.; Singer, N.G.; Caplan, A.I. "Amplification of Alu sequences for detection and tracking of human mesenchymal stem cells in a murine model of arthritis", American College of Rheumatology, Annual Rheumatology Research Workshop, June 2010. Poster presentation.

**Oral Presentations:**

1. **Lowe, R.M.** "CTLA-4 microsatellite polymorphism affects risk for type 1 diabetes", Annual Immunology of Diabetes Conference (IDS), June 1998. Oral and poster presentations.
2. **Lowe, R.M.;** Genin, A.; Weaver, C.T.; Cron, R.Q. "Epigenetic regulation of the CD154 gene in children and adults with lupus", Children's Health Research Center (CHRC) Annual Retreat in Santa Monica, CA. September 2012. Oral and poster presentations.
3. **Lowe, R.M.;** Zhang, M.; Cron, R.Q. "Role of FoxP3 in blocking transcriptional activation of HIV-LTR in regulatory T cells", Creative and Novel Ideas in Research Annual Research Symposium, Kuala Lumpur, Malaysia, July 2013. Oral presentation.

**MISCELLANEOUS/VOLUNTEER WORK:**

1. **Lowe, R.M.;** Rose, N.R. "What every American needs to know about autoimmune disease." Public forum sponsored by the American Autoimmune Related Diseases Association. October 2, 2010 and October 5, 2013. Oral Presentation.
2. UAB Pediatric Residency Program Career Day, Panel Discussion, "Careers in Academic Medicine", Birmingham, AL, March 1, 2013. Invited Faculty Panel Speaker.
3. Juvenile Arthritis Foundation, JIA Saturdays for families. "Juvenile Idiopathic Arthritis", Birmingham Zoo, AL, September 8, 2012. Invited public speaker.
4. Camp physician, Camp MASH (for children with arthritis and other rheumatic disease), Mobile, AL, July 2011, 2012. 2013.
5. UAB Pediatric Residency Program Career Day, Panel Discussion, "Careers in Academic Medicine", Birmingham, AL, February 13, 2012. Invited Faculty Panel Speaker.
6. Health Tap – online provider of pediatric rheumatology information during personal time (weekends, evenings) to the public, enhancing the status of our division as a national leader in the care of children with pediatric rheumatologic conditions.