

2905 E. Aurora Ave
Apartment #112
Boulder, CO 80303

BALAJI V. SRIDHAR
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Home Address:
9066 E. Colorado Circle
Denver, CO 80231

EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, MA 4.7/5.0 GPA B.S. Class of 2009
Chemical-Biological Engineering Major, Applied International Studies Minor, Concentration in Spanish

University of Colorado School of Medicine, Denver, CO M.D. Candidate

Relevant coursework: Anatomy, Biochemistry, Blood and lymph, Disease and Defense, Cardiovascular, Pulmonary, and Renal systems, Neuro system/Psychiatry, Digestive, Endocrine, and Metabolic systems, Infectious Diseases, and Life Cycles. Pathology, Physiology, and Pharmacology for each system

University of Colorado, Boulder, CO Chemical Engineering Ph.D. Candidate

Cartilage regeneration project in Professor Kristi Anseth's lab

Relevant Coursework: Analytical Methods, Research Method and Ethics, Reaction Engineering, Mass and Heat Transport, Engineering Thermodynamics.

RELEVANT SKILLS

Laboratory: Polyethylene glycol (PEG) polymer synthesis, peptide synthesis, designing mathematical models for polymer degradation, 3-D culture of cells. RT-PCR, High performance liquid chromatography (HPLC), DNA recombination (gene knockout), vector cloning gel electrophoresis, Southern, Western, and Northern blot methods. Fluorescent and confocal microscopy, cell cultures techniques (bacterial, endothelial, nerve cells, smooth muscle, cancer cells, and stem cells). Microchannel fabrication with polydimethyl siloxane (PDMS).

Languages: Spanish (fluent), Tamil (native language), Mandarin Chinese (Level V), German (Level I)

Computer Skills: Excel, Matlab, HTML, Java (level I)

RELEVANT EXPERIENCE

Anseth Lab, University of Colorado

Boulder, CO

Ph.D. Project: Cartilage tissue regeneration using a thiol norbornene gel scaffold

Summer 2009: Characterizing growth of pulmonary epithelial cells in a photodegradable gel system

Professor Stephanie Bryant, University of Colorado

Boulder, CO

Summer 2010: Quantifying cardiomyocyte gene expression/ Modeling the degradation of a PEG gel

Dr. JM Torné Lab, Consejo Superior de Investigaciones Científicas (CSIC)

Barcelona, Spain

January 2008: Purified, stabilized, and characterized transglutaminases from *E. coli* and tobacco plants.

Langer Lab, Massachusetts Institute of Technology

Cambridge, MA

Fall 2005- Spring 2009: Various tissue engineering projects characterizing cell growth on patterned surfaces.

Dr. Gutierrez-Hartmann's Lab (Chairman, M.D-Ph.D Program), University of Colorado

Denver, CO

Summer 2006 & Summer 2007: Effect of ESE-1 on breast cancer, role of Ras pathway in pituitary tumors.

University of Colorado Health Sciences Cancer Center Fellow

Dr. John James (Epidemiologist and Microbiologist), Children's Hospital, Denver

Denver, CO

Summer 2003 Optimization of a novel treatment of removing arsenic from drinking water treatment sludge

Summer 2002 Removal of arsenic from drinking water treatment sludge, Children's Hospital, Denver.

LEADERSHIP

Leadership: -Cofounder of Nanoly Bioscience Inc.

-Initiated a program to bring in students from Aurora Hills Middle School to see the school of medicine campus, talk to other medical students, and perform eyeball dissections. The program's intention is to inspire minority students from generally low-income backgrounds. Currently run by students at the campus.

- Key member of organizing committee for 2012 National MD/PhD Student conference in Keystone, Colorado.

-Member of orthopedic student interest group and the surgical society at CU. Invited medical professionals to talk to students about their careers and teach students about medical techniques and technologies.

-Elected VP of the MIT chapter of the American Institute of Chemical Engineers (AIChE); organized AIChE Industrial Seminar Series for companies to provide information to MIT students.

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ACTIVITIES

Athletics: - Squash: Currently 5.0 player, MIT Varsity NCAA Squash (4 yrs) only MIT player to play in the 2008/2009 individual nationals. Elected Captain '07-'08 & '08-'09; voted Most Improved Player '06-'07.
-Basketball: MIT Varsity NCAA Division III (1/2 yr), CU intermural basketball summer '12 champion
-Swimming: Competed at national level for 9 years; top 10 in state in back and fly. Olympic Trails qualifier '04
-Dancing- Qualified to be on Indian and hip hop dance teams in 2009
Travel: Kenya, Brazil, Argentina, Europe, Asia, Australia, Canada, Chile, Mexico, Bermuda, Russia, Mongolia, all 50 states in the USA.
Other Interests: Piano, Lisa Sanders cases in New York Times, Denver Nuggets basketball fan.

AWARDS & RECOGNITIONS:

-2012 Nanoly Bioscience: Duke University Start-up Challenge Winner out of 118 companies, Placed 3rd out of 1,800 teams in the Dell Social Innovation Challenge, Placed Top 10 in NASA and Space Frontier competition, UC Berkeley Startup Competition Elevator Pitch Winner out of 38 teams, 1st place in VC Taskforce's Life Sciences Investor Pitch, 3rd place out of 70 companies in Cornell Venture Challenge.
-2010 & 2011 Recognized as one of the best students at the University of Colorado SOM class of 2013.
-2004 World Engineering Congress: Shanghai, China, represented the U.S. in the Quadrennial International Project Show for Future Engineers, 3rd prize.
-2004 Stockholm Junior Water Prize: New Orleans, LA, U.S. Finalist; invited to exhibit project at the Oct 2004 Water Environment Federation (WEF) Technical Exhibition and Conference.
-Water Environment Research Foundation's 2004 Paul L. Busch Award: Research paper on Optimization of arsenic removal selected as one among top ten submitted from all researchers, all ages.

RECENT PUBLICATIONS

Stephanie L. Hume, Sarah M. Hoyt, John S. Walker, **Balaji V. Sridhar**, John F. Ashley, Christopher N. Bowman, Stephanie J. Bryant, "Alignment of multi-layered muscle cells within three-dimensional hydrogel macrochannels," Acta Biomaterialia, Vol 8, Issue 6, July 2012, Pages 2193-22022