

CURRICULUM VITAE

MAYA P. NAIR

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A. Education

1981-1984 B.Sc. in Chemistry, University of Kerala, India
1984-1986 M.Sc. in Applied Chemistry, Cochin University of Science & Technology, India
1987-1993 Ph.D. in Chemistry, University of Kerala, India

B. Professional Experience

1986-1987 Graduate Research Assistant, Indian Space Research Organization, India
1991-1992 Post Doctoral Fellow, University of Texas at Austin, Texas
1994-1995 Post Doctoral Fellow, University of Texas Health Science Center,
San Antonio, Texas
1996-1997 Research Associate, University of North Texas Health Science Center,
Fort Worth, Texas.

09/01/1997 to present: Research Assistant Professor, University of North Texas Health Science Center, Fort Worth, Texas.

Responsibilities: Design, develop and teach courses. Participate in Summer undergraduate training programs. Train/ supervise graduate and undergraduate students to do basic research, evaluate the progress of the students and report it to Dean Graduate School. Design and perform experiments. Collect data, analyze the data, and make reports. Publish papers apply for funding - prepare grant, design the budget with justification. Verify the pricing and salary requirements. Served at various capacities, participated in teaching, student admission interviews, Direct courses - Design the course, teach the course, train the students, analyze and evaluate the results

9/1/2008 – 8/31/2010 - Academic Advisor, PREPARE Program, UNTHSC

Train/ supervise undergraduate students and mentor them for their preparation to graduate school. Participate in student recruitment. Schedule meeting and training, collect information and analyze the data. Evaluate the results and propose suggestions to improve the training. Identify the strength and weakness of each students and design program to improve their skills.

09/01/2007 to present: Biosafety officer, University of North Texas Health Science Center, Fort Worth, Texas.

Responsibilities: Develop and manage the biosafety program for the school. Compiled a biosafety policy and procedure for the school. Function as a liaison between NIH, and UNTHSC. Develop and implement training to all the students, faculty, IBC members and other school officials who will be associated with institutional compliance. Create the database, analyze, evaluate and create report for internal and external auditing. Prepare report for school SACS accreditation. Provide the necessary support and training for the principal investigator to carry out the project/research according to the regulations and the institutional policy. Design and maintain the IBC Web page with current information. Develop advertisement materials.

Professional Training

Faculty Development training – UNTHSC, Fort Worth Texas – Ongoing
Handling Difficult Conversation

Team Based Learning
Writing Learning Objectives
Using Copyright Materials

Engaging Learners, University Forum on Teaching and Learning, UNT Denton, Texas

Institutional Biosafety Committee – 101, UT Austin, Texas.

Laboratory Biosafety level 2 Training – The University of Texas Medical Branch, Galveston, Texas, June 2007.

Radiation Safety Officer Training, Nevada Technical Associates, Las Vegas, Nevada, May 2010.

C. Professional awards or honors

Judges Travel Subsidy Award 2008 ANNUAL BIOMEDICAL RESEARCH CONFERENCE FOR MINORITY STUDENTS (ABRCMS).

Post Doctoral Fellowship, UT Austin, Austin, Texas - 1991

University Grants Commission Fellowship, Govt. of India 1986-1990

D. Professional Societies

Dates	Office Held	Organizations
2007- present	Member	ABSA (American Biological Safety Association)
2008 - present	Member	ABSA, Educational Operation Committee
2006 - 2009	Member of Bio safety Committee	UNTHSC
2006 - 2009	Member of Radiation safety Committee	UNTHSC
2005- present	Chemical and Radiation Safety Coordinator	UNTHSC, Department of MBI
2008 - present	Member IACUC	UNTHSC
2011 - present	Member – Infection Control Committee	UNTHSC

E. Teaching Experience

At UNTHSC

Courses Taught

- MOLB 5201 (Graduate)
- EOHS Sampling and Analysis (Public Health)
- EOHS 5330 –RECOGNITION, EVALUATION AND CONTROL OF ENVIRONMENTAL HAZARDS
- BMSC 5301 Integ Biomed Sci 1: Biochemistry (Medical)
- BIOC 5940 (Graduate)
- MICR 5940 (Graduate)
- BIOC 5970 (Graduate)
- BIOC 5910, Special Problems (Laboratory techniques and Instrumental analysis)
- Cellular Science 9110 Workshops (Medical & PA Program)
- JAMP Biochemistry (MEDICAL)
- BHS – Basic Health Science Course for Physician Assistant Program
- BMSC - 5900 – 002 (Medical & Graduate)
- BMSC - 5900 – 003 (Medical & Graduate)

Course Director

- MOLB 5201 (Graduate)
- BMSC5900-002 – Introductory Biochemistry (Design and Taught)
- Biochemistry for Joint Admission Medical Program (JAMP) (Design and Taught)

Assistant Course Director: Cellular Science 9110 Workshops

Texas Christian University, Department of Chemistry, Fort Worth.

Course director - Design and taught

Advanced Biochemistry (CHEM/BIO 50143) – Undergraduate

Advanced Biochemistry (CHEM/BIO 50502) – Undergraduate (Lab practicals)

Teaching Experience/Community Projects

Coach, Christopher Columbus Award program: 2004-2005

Christopher Columbus Awards program is a cross-curricular activity that meets science education standards. With the help of an adult coach, middle school students (*) work in teams to identify a community issue they care about and use science and technology to develop an innovative solution. They work with experts, conduct research and put their ideas to the test, just like adult scientists. This is science and community involvement at its best, with real rewards.

Maya P. Nair (Coach), Courtney Schneider*, Satvika Ananthanarayan* , Michael Lu*, and Ashwin Chandra*, “Happy’Bout Healthy”, PREVENTION OF CHILDHOOD OBESITY. Project report submitted for Christopher Columbus Award Program, 2004.

Maya P. Nair, Walter J. McConathy, Andras G. Lacko, Courtney Schneider, Satvika Ananthanarayan , Michael Lu, and Ashwin Chandra, “HOPE FOR HEALTH”, PREVENTION OF CHILDHOOD OBESITY. Research Appreciation Day, University of North Texas Health Science Center, Fort Worth, TX. 2004.

Maya P. Nair (Coach), Paul Blazek*, Ashly Wang* and Ashwin Chandra*, PREVENTION OF NEIGHBOURHOOD SPEEDING. Project report submitted for Christopher Columbus Award Program, 2005.

Teacher coordinator and Teacher: 1998 - present

Chinmaya Mission Balavihar, Dallas, Texas.

Coordinate and teach Sunday school. Work with students from K -12 to teach them the values of life and helping them to be good citizens of the country to secure the present and future world

“ Journey to The Land of Vedas” - An interactive program developed to introduce the culture and tradition of India to our future generation, a culturally diverse population, a global community. This program was presented at various campuses of Dallas County Community College District as a part of their Asian-American/Middle Eastern-American Studies.

Supervising and training students: 1997 - present

University of North Texas health Science Center, Fort Worth Texas.

Training graduate students, SMART/Mc. Nair students

Work with students participating in different programs offered by UNTHSC. Explain and teach the laboratory techniques and the working principle.

F. Service

1. TCOM admission interviews.

2. UNTHSC PA Admission Interviews

3. Professional Service

Local:

1. Asian Advisory Committee Member, Texas Women's Museum, Dallas, Texas. 2008 – 2009.
2. Speaker, Summer enrichment programs for High school Girls, Texas Women's Museum - Biochemistry as a tool for a Better Profession
3. Member of the expert panel for scientific presentations at the local Middle school.
4. Coach for science fair projects, High school and Middle school students.

National:

1. Expert Panel Member HOSA (Health Occupational Students Association)/ Judge for national level competition 2009.
2. Member of the Judging Panel for scientific poster presentation, 2008 Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2008, Florida
3. Member of the Judging Panel for scientific poster presentation, 2009 Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2009, Arizona

4. Community Service

Coordinator and teacher - Sunday school, Develop educational program to introduce the culture and tradition of India to our future generation, a culturally diverse population, a global community.

G. Professional activity

Grant review for: CPRIT High Risk/High Impact

Consultant for Irving Art of science – a non-profit organization promoting science for children.

Patent Applied

PATENT: UTSC: 1013USP1

PROVISIONAL APPLICATION FOR UNITED STATES LETTERS PATENT For HDL PARTICLES FOR DELIVERY OF NUCLEIC ACIDS

Anil K. Sood, Andras G. Lacko, Gabriel Lopez-Berestein, Lingegowda S. Mangala, Walter J. McConathy, Laszlo Prokai, and Maya P. Nair.

Manuscript Reviews

Journal of Experimental Cell Research

Journal of Colloid and interface Science

H. Scholarly activity

Invited Seminars

a. National

Meeting Title: nano TX USA '08, Dallas, TX, USA.

Date: October 2 2008

Role: Invited Speaker Scope: National

b. International

Meeting Title: 95th Indian Science Congress, Vizag, India.
Title of presentation: A Lipoprotein Based Novel Drug Delivery System to Overcome Stress Induced Immune Suppression During Cancer Chemotherapy.
Date: January 2, 2008
Role: Invited speaker Scope: International

Meeting Title: 97th Indian Science Congress, Trivandrum, India
Title of presentation: Targeted delivery of drugs via biocompatible Nano particles
Date: January 3, 2010
Role: Invited speaker Scope: International

Meeting Title: 97th Indian Science Congress, Trivandrum, India.
Date: January 7, 2010
Role: Chair of the section - Symposium on Clinical medicine and epidemiology
Scope: International

Publications

Published Full Length Articles

Shahzad MM, Mangala LS, Han HD, Lu C, Bottsford-Miller J, Nishimura M, Mora EM, Lee JW, Stone RL, Pecot CV, Thanappapasr D, Roh JW, Gaur P, Nair MP, Park YY, Sabnis N, Deavers MT, Lee JS, Ellis LM, Lopez-Berestein G, McConathy WJ, Prokai L, Lacko AG, Sood AK. Targeted delivery of small interfering RNA using reconstituted high-density lipoprotein nanoparticles., *Neoplasia*. 2011 Apr;13(4):309-19.

Mooberry LK, Nair M, Paranjape S, McConathy WJ, Lacko AG., Receptor mediated uptake of paclitaxel from a synthetic high density lipoprotein nanocarrier, *J Drug Target*. 2010 Jan; 18(1): 53-8.

Sarkar P, Bharill S, Gryczynski I, Gryczynski Z, Nair MP, Lacko AG.. Binding of 8-anilino-1-naphthalenesulfonate to lecithin:cholesterol acyltransferase studied by fluorescence techniques.. *J Photochem Photobiol B*.. July24,2008; 92: 19-23.

McConathy WJ, Nair MP, Paranjape S, Mooberry L, Lacko AG. . Evaluation of synthetic/reconstituted high-density lipoproteins as delivery vehicles for paclitaxel.. *Anti-cancer drugs*. 2008 Feb ; 19. (2): 183-8.

Singhal SS, Singhal J, Nair MP, Lacko AG, Awasthi YC, Awasthi S., Doxorubicin transport by RALBP1 and ABCG2 in lung and breast cancer. *Int J Oncol*. Mar;30(3):717-25., 2007

Reshetnyak Y, Tchedre KT, Nair MP, Pritchard PH, Lacko AG. Structural differences between wild-type and fish eye disease mutant of lecithin:cholesterol acyltransferase., *J Biomol Struct Dyn*. 24(1):75-82, 2006.

Lacko AG, Nair M, Paranjape S, Mooberry L, McConathy WJ. Trojan Horse Meets Magic Bullet to Spawn a Novel, Highly Effective Drug Delivery Model. *Chemotherapy*. 2006 May 10;52(4):171-173

Lane SB, Tchedre KT, Nair MP, Thigpen AE, Lacko AG. Characterization of lecithin:cholesterol acyltransferase expressed in a human lung cell line., *Protein Expr Purif* Aug;36(2):157-64, (2004).

Andras G. Lacko, Maya Nair, Sulabha Paranjape, Shemedia Johnson and Walter J. McConathy. Novel delivery system for targeted cancer chemotherapy. In *Stem Cell and Targeted Therapy*; K.A. Dickey and A. Keating Eds. Garden Jennings Pubs (2003).

Andras G. Lacko, Maya Nair, Sulabha Paranjape, Shemedra Johnson and Walter J. McConathy. High density lipoprotein complexes as delivery vehicles for anticancer drugs, *Anticancer Research* 22: 2045 – 2050 (2002)

Murray KR, Nair MP, Ayyobi, AF, Hill JS, Pritchard PH, Lacko AG. Probing the 121-136 domain of LCAT using antibodies. *Archives of Bioch. Biophys* 385:267-275 (2001).

Ayyobi AF, Lacko AG, Murray K, Nair M, Li M, Molhuizen HO, Pritchard PH. Biochemical and compositional analyses of recombinant lecithin:cholesterol acyltransferase (LCAT) obtained from a hepatic source. *Biochim Biophys Acta* 1484:1-13 (2000).

K R. Murray, Maya P. Nair, WJ. McConathy and A G. Lacko. Enzyme-linked immunoassay for lecithin:cholesterol acyltransferase. *Analytical Letters* 32:1553-1564 (1999).

AG Lacko, A J. Reason, C Nuckols, BJ Kudchodkar, G. Sundarajan, MP Nair, PH. Pritchard, HR Morris and A Dell. Characterization of recombinant and circulating forms of human plasma LCAT: Carbohydrate structure and catalytic properties *J. Lipid Res* 39:807-820 (1998).

Maya Nair, B.J. Kudchodkar, P.H. Pritchard and A.G. Lacko. Purification of recombinant Lecithin:cholesterol acyltransferase. *Protein Expr. and Purif.* 10: 38-41 (1997).

W. McConathy, S. Boustead, B.J.Kudchodkar, M.P.Nair, P.Brett. M. Clearfield and A.G.Lacko, Interactions of LCAT and Apolipoprotein D, Proc. International Symposium on The Role of HDL in Disease Prevention, Fort Worth, Texas, (1996).

Q. Shen, M.P.Nair and K. W. Harris. The Soluble Erythropoietin Receptor Expressed in Yeast Requires the WSX-WS Domain for Secretion., American Society of Hematology, 38th National Meeting, (1996).

M. P. Nair and K.W. Harris. Characterization of The Human Erythropoietin Receptor Extracellular Domain Expressed in Yeast. *Blood*, 86: 10, 18a, (1995).

Manuscript under preparation

Mian M.K. Shahzad^{1,2}, Lingegowda S. Mangala¹, Hee Dong Han¹, Chunhua Lu¹, Rebecca L. Stone¹, Edna M. Mora^{3,4}, Jeong-Won Lee¹, Maya P. Nair⁵, Nirupama Sabnis⁵, Puja Gaur³, Ju-Seog Lee⁵, Lee M. Ellis³, Gabriel Lopez-Berestein^{7,8,9}, Walter J. McConathy¹⁰, Laszlo Prokai⁵, Andras G. Lacko⁵, and Anil K. Sood^{1,7,9}, Targeted Delivery of Small Interfering RNA Using rHDL Nano particles, submitted to nature nanotechnology

Book chapters, monographs and other publications

AG. Lacko, M Nair, S Paranjape, S Johnson and WJ. McConathy. Novel delivery system for targeted cancer chemotherapy. In *Stem Cell and Targeted Therapy*; K.A. Dickey and A. Keating Eds; pp179-183. Garden Jennings Pubs (2003).

A.G. Lacko, M. Nair, and W.J. McConathy. Lipoprotein Nanoparticles as Delivery Vehicles for Anti-cancer Therapy. In *Nanotechnology for Cancer Therapeutics*. pp 777-785. CRC Press 2006. M. Amiji Editor

Andras G. Lacko, Maya Nair and Walter J. McConathy. Lipoproteins as drug delivery vehicles., *Current Drug Delivery*, Chapter 37 (2006).

Lacko AG, Nair M, Paranjape S, Mooberry L, McConathy WJ. Trojan Horse Meets Magic Bullet to Spawn a Novel, Highly Effective Drug Delivery Model. *Chemotherapy*. 2006 May 10;52(4):171-173

Published Abstracts

Karen Murray, Maya Nair, P. Haydn Pritchard and A.G. Lacko. Structural Domains of Lecithin cholesterol acyltransferase (LCAT) *FASEB J.* 12(8):A1381;410 (1998)

Karen Murray, Maya Nair, P Haydn Pritchard and A.G. Lacko. Structural Domains of Lecithin cholesterol acyltransferase (LCAT) *Proc. EAS Congress 1998* p. 21.

K R. Murray, M P. Nair, P. H Pritchard and A G. Lacko. Investigation of the 121-136 Domain, a putative Lipoprotein Binding Site of Lecithin Cholesterol Acyltransferase. *Proceedings Society of Experimental Biology Medicine*. Vol. 223, No. 3, March 2000.

Andras G. Lacko, Maya Nair, Sulabha Paranjape, Shemedra Johnson and Walter J. McConathy. Novel Delivery system for Breast cancer chemotherapy
Department of Defense, Congressionally directed medical Research Program
"ERA of Hope" Breast Cancer Research Review, Orlando Florida

Andras G. Lacko, Maya Nair, Sulabha Paranjape, Shemedra Johnson and Walter J. McConathy. Novel Delivery system for targeted cancer therapy. The 11th International ABMT Symposium on Stem Cell and Targeted Therapy; Arlington, TX

Targeted Drug Delivery By Reconstituted High Density Lipoproteins (rHDL). Linda Mooberry, Maya Nair, Subha Paranjape, Walter J. McConathy and Andras G. Lacko.
FASEB Journal 17:A1316.2003. http://select.biosis.org/faseb/eb2003_data/FASEB001084.html

Horse serum HDL as drug transporters. Johnson, S., Nair, M.P. Lacko, A.G. Presented at the meeting of the American Society for Biochemistry and Molecular Biology, Boston MA, 2004.

Lacko AG, Nair, M. Paranjape S, Mooberry L, McConathy, WJ, Targeted drug delivery via reconstituted high density lipoproteins (rHDL). Presented at the World Congress of dosing of anti-infectives and anti-neoplastic agents. (Dosing of Magic Bullets). Held to Commemorate the 150th anniversary of the birth of Paul Ehrlich, Nürnberg Germany, September 2004.

Maya P. Nair, Walter J. McConathy, Andras G. Lacko, Courtney Schneider, Satvika Ananthanarayan Michael Lu, and Ashwin Chandra, "HOPE FOR HEALTH", PREVENTION OF CHILDHOOD OBESITY. Research Appreciation Day, University of North Texas Health Science Center, Fort Worth, TX. 2004.

Andras G. Lacko, Maya Nair, Sulabha Paranjape, Linda Mooberry and Walter J. McConathy. Advanced Drug Delivery system for Breast cancer chemotherapy Department of Defense, Congressionally Directed Medical Research Program "ERA of Hope" Breast Cancer Research Review, Philadelphia Pennsylvania, 2005. http://mrmcweb4.detrick.army.mil/bcrp/era/abstracts2005/0110582_abs.pdf

Lacko AG, Nair, M. Paranjape S, Mooberry L, McConathy, WJ, Receptor mediated uptake of anti-cancer drugs from reconstituted high density lipoproteins (rHDL). Presented at HIGH DENSITY LIPOPROTEINS: FROM BASIC SCIENCE TO THERAPEUTIC APPLICATIONS, Parma Italy. A satellite conference for the XIV International Symposium on Atherosclerosis Satellite Symposium

Nair M., Awasthi S*, Singhal S*, Paranjape S., Mooberry L., Mc Conathy WJ., Lacko AG, Jones H. A Lipoprotein Based Novel Drug Delivery System to Overcome Stress Induced Immune Suppression During Cancer Chemotherapy. Drug Delivery and Translational Research. International meeting held at POLYTECHNIC UNIVERSITY • BROOKLYN, NY, DECEMBER 4-5, 2006.

L. Mooberry, S. Paranjape, M. Nair, W. McConathy, A. Lacko. Reduced Toxicity and Selective Uptake of Paclitaxel Via Encapsulation in Reconstituted High Density Lipoprotein (rHDL). Drug Delivery and Translational Research. International meeting held at POLYTECHNIC UNIVERSITY • BROOKLYN, NY, DECEMBER 4-5, 2006.

7. Continuing Education

a. State/Regional

Meeting Title: IBC 201 Conference, Austin, Texas
Date: September 2, 2008
Role: Attendee Scope: State/Regional

b. National

Meeting Title: nanoTX USA '07, Dallas, TX, USA.
Date: October 2 2007
Role: attendee Scope: National

Meeting Title: 2008 Annual Biomedical Research Conference for Minority Students (ABRCMS)
Date: November 5 2008
Meeting Location: Orlando, Florida
Role: Attendee
Scope: National

Meeting Title: 2009 Annual Biomedical Research Conference for Minority Students (ABRCMS)
Date: November 4, 2009
Meeting Location: Arizona
Role: Attendee
Scope: National

2007-2011 – ABSA conference, Attending pre conference courses on biosafety programs.

References:

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Skills:

Design and teach courses
Development of training modules
Creating training materials (Posters, flyers, power point slides.)
Proficient in Microsoft Office, Website Builder, Microsoft Access, Adobe Photoshop
Interested in working with people. Strong communication skills
Data collection and analysis