

## CURRICULUM VITAE

### Shivendra D. Shukla, Ph.D.

#### ADDRESS:

**Department:**

Department of Medical Pharmacology & Physiology  
University of Missouri  
School of Medicine  
M526 Medical Sciences Building  
One Hospital Drive  
Columbia, Missouri 65212  
Tel: (573) 882-2740  
Email: shuklasd@health.missouri.edu

#### EDUCATION:

B.Sc.	1968	Botany, Zoology, Chemistry, Banaras Hindu University, India
M.Sc.	1970	Biochemistry, Banaras Hindu University, India
Ph.D.	1977	Biochemistry, University of Liverpool, England

#### ACADEMIC APPOINTMENTS:

1971-1973	Lecturer (Temp) Biochemistry, Banaras Hindu University
1974-1976	Demonstrator; Biochemistry, University of Liverpool, England
1976-1980	Research Fellow/Postdoctoral Position; Biochemistry, University of Birmingham, England
1980-1983	Research Instructor; Biochemistry, UTHSC, San Antonio, Texas
1983-1984	Research Assistant Professor; Biochemistry, UTHSC, San Antonio, Texas
1984-1989	Assistant Professor; Department of Pharmacology, University of Missouri-Columbia
1989-1993	Associate Professor and Director of Graduate Studies; Department of Pharmacology, University of Missouri-Columbia
1993-present	Professor; Department of Pharmacology / Medical Pharmacology & Physiology, University of Missouri School of Medicine-Columbia
2008-present	Margaret Proctor Mulligan Endowed Professor in Medical Research

#### PROFESSIONAL ORGANIZATIONS/MEMBERSHIPS:

American Society for Pharmacology & Exp. Therapeutics (ASPET) 1989-present  
Member of University of Missouri-Columbia Graduate Faculty  
Member of University of Missouri-Columbia Doctoral Faculty  
Physiological Society of India (Life member)  
Indian Science Congress Association (Life Member)  
Research Society of Alcoholism (USA)  
International Society for Biomedical Research on Alcoholism (ISBRA)

## HONORS/AWARDS/CITATIONS:

1. State Merit Scholarship (India) 1964-1966
2. Atomic Energy Commission (India) 1968-1970
3. BHU-University Gold Medal (India) 1970
4. Council of Scientific and Industrial Research Fellowship (India) 1971
5. National Scholarship (India) 1973-1976
6. Science Research Council Fellowship, England 1976-1979
7. American Heart Association, Texas Affiliate, Grant-In-Aid Awardee
8. American Men and Women of Science, Who's Who
9. NIH Research Career Development Award (RCDA) 1989-1994
10. Chancellor's Award for Research & Creativity (finalist), 1993
11. Award for Excellence in Medical Student Education, University of Missouri School of Medicine, 1999
12. **News paper/Editorial Coverage of Dr. Shukla's work:**
  - a. Trends in Biochemical Sciences 7:235, 1982
  - b. Columbia Missourian, November 6, 1986, p.2
  - c. Columbia Missourian, February 9, 1989, 1C (Full article)
  - d. The Genesis Report, August 1992
  - e. Columbia Missourian, November 4, 1999 (Full article)
  - f. Columbia Missourian, Frontiers in Technology & Health, April 19, 2002
  - g. Columbia Missourian, Second Front, March 15, 2004 (Full article)
  - h. Newspaper article in "Amar Ujala" an Indian daily, Dec 30, 2004
  - i. TV Interview on research by "Sahara TV" channel (India), Jan 3, 2005
  - j. Newspaper interview on epigenetic research: Hindi 'Aaj', Oct 30, 2007 issue
  - k. Newspaper interview in Hindi paper: 'Amar Ujala', Oct 30, 2007 issue
  - l. Article highlighted in news media, 2013:  
[www.sciencedaily.com/releases/2013/01/130122162234.htm](http://www.sciencedaily.com/releases/2013/01/130122162234.htm)  
<http://alcohol-news.com/tag/alcoholic-liver-disease>
  - m. News coverage of binge research in several news reports, 2014, 2015
  - n. News coverage of binge alcohol research by media in 2016 including ABC/Fox TV.
  - o. Newspaper coverage of MU-India Day in Jan 26, 2018 issue of Columbia Missourian; faculty advisor CAI S.D.Shukla.
  - p. News coverage on national & international news media about our research on susceptibility of female to binge alcohol, 2019.
13. Awarded 'Order of Socrates II' for contribution to Medical Education, 2008
14. Awarded Margaret Proctor Mulligan Endowed Professorship, 2008

### Web links to some of the recent news coverage:

Links below highlight recent coverage on national & international news media about lab's research on alcohol binge drinking and susceptibility of female to binge alcohol:

Science Daily (2013)

[www.sciencedaily.com/releases/2013/01/130122162234.htm](http://www.sciencedaily.com/releases/2013/01/130122162234.htm)

<http://alcohol-news.com/tag/alcoholic-liver-disease>

EurekaAlert (2014)

[http://www.eurekaalert.org/pub\\_releases/2014-10/uom-mri100814.php](http://www.eurekaalert.org/pub_releases/2014-10/uom-mri100814.php)

US News & World Report (2015)

<https://health.usnews.com/health-news/articles/2015-12-30/chronic-drinking-plus-binge-drinking-spurs-rapid-liver-damage-in-mouse-study>

Yahoo News

<https://in.news.yahoo.com/binge-drinking-harms-liver-081804917.html>

Science Daily

<https://www.sciencedaily.com/releases/2015/12/151217111440.htm>

Fox news

<https://video.foxnews.com/v/4676812038001/?#sp=show-clips>

Male & female binge drinking research (2019)

[https://www.eurekaalert.org/pub\\_releases/2019-08/uom-bdm081919.php](https://www.eurekaalert.org/pub_releases/2019-08/uom-bdm081919.php)

<https://www.msn.com/en-gb/health/medical/binge-drinking-may-be-more-damaging-to-women/ar-AAG4c0T>

<https://newsd.in/binge-drinking-more-injurious-to-women-study/>

Binge research interview by Healthline (2021)

<https://www.healthline.com/health-news/should-you-avoid-all-alcohol-heres-what-the-experts-think>

## REVIEWER FOR GRANTS:

National Science Foundation (NSF)

Invited to NIH Site Visit Team for Program Project Grant

Reviewer for British Columbia Health Research Foundation (Canada) Grants

MU Research Board

NIH - Special Reviewer, Cell Biology and Physiology Study Section, 1993

NIH - Special Reviewer, Mental Health AIDS Immunology-2 Study Section, 1993

NIH - Special Emphasis Panel (NHLBI), 1994

American Heart Association, Missouri Affiliate

Israel Science Foundation

NIH - Study Section, Neurological Science 1, Ad hoc, 1997

NIH - Study Section, Special Emphasis Panel, ALTOX-4, 1999

NIH – Study Section, (**Regular member**) ALTOX-4, 2000-2003

NIH – Member Reverse Site Visit Team for Center Grant, April 2003

NIH- Member ZRG1 GMA-3 study section October 2003

NIH- Member (**Regular member**) XNDA study section 2003-04

NIH- Member ZAA study section July 12, 2004  
NIH- Member ZAA 1 CC study section July 27, 2004  
NIH- Member ZRG1 DIG-F study section March 2005  
NIH- Member Reverse Site Visit, Center grant (ZAA1 HH) June, 2005  
NIH- Member ZRG1 DIG F (2) study section Nov. 2005  
NIH- Member ZAA1 DD50 study section Nov. 2005  
NIH- Member AA-1 Study section, Feb 2006  
NIH- Member ZRG-1 DIG-C, March 2006  
NIH- Member (Ad hoc) HBPP study section, June 2006  
NIH- Member (Ad hoc) Neurogenesis & Cell Fate study section, June 2006  
NIH- Member (Ad hoc) AA-1 and DD-80 study sections, Oct. 2006  
NIH- Member (**Regular member**) Biomed Res. Review AA-1 (**2007-2010**)  
NIH- Member (Ad-hoc) Digestive Disease & Nutrition study section, Feb, 2007  
NIH- Member (Ad-hoc) ZRG1 (DKUS-D) Jan. 2011  
NIH- **Chair** NIH study section (Ad hoc) ZAA1-DD3, March 2011  
NIH- Member study section (Ad hoc) ZRG1-DKUS-D3, Aug 2011.  
NIH- **Chair** NIH study section (Ad-hoc) ZAA-DD1, March 2013.  
NIH-**Chair** –Study section (Ad-hoc) ZAA-DD5, July 2013  
NIH-Member-Ad-hoc, HBPP study section, Dec 2013

#### REVIEWER FOR JOURNALS:

Alcoholism: Clinical & Experimental Research  
American Journal of Physiology  
Archives of Biochemistry and Biophysics  
Biochemical Journal  
Biochemical Pharmacology  
Biochimica et Biophysica Acta  
Biomolecules  
DNA Sequence  
Genes & Nutrition  
Hepatology  
Hypertension  
International Journal of Biochemistry and Cell Biology  
Journal of Biological Chemistry  
Journal of Cell Physiology  
Journal of Lipid Mediators and Cell Signaling  
Journal of Neurochemistry  
Journal of Pharmacology and Experimental Therapeutics  
Journal of Reproduction and Fertility  
Life Sciences  
Lipids  
Metabolism: Clinical & Experimental  
Molecular Brain Research  
Molecular and Cellular Biochemistry  
Molecular Cancer Therapeutics  
Molecular Pharmacology

Molecules  
Nature  
Oncogene  
Oncotarget  
Pharmacological Research  
PLOS-One  
Proceedings of the National Academy of Sciences  
Thrombosis and Haemostasis  
World J. Gastroenterology  
World J. Hepatology

#### **EDITORIAL RESPONSIBILITIES:**

1. Editor of the book on "Platelet Activating Factor Receptor: Signal Mechanisms and Molecular Biology," CRC Press, 1993.
2. Editorial Board Member, World Journal of Gastroenterology, 2005-present.
3. Editorial Board Member, J. Pharmacology & Exp. Therapeutics 2008-2017.
4. Editorial Board Member, World J. Hepatology, 2009-present.
5. Editorial Board Member: Alcohol Research: Current Reviews (NIH Journal), 2009-2018.
6. Co-Editor: Alcohol Research: Critical Reviews, Special issue on Epigenetics Vol 35(1), 2013. (A NIH Publication)
7. Co-Editor: Alcohol Research: Current Reviews: Special issue on Binge Drinking, Vol 39 (1), 2018. (A NIH Publication)
8. Editorial Board Member, Biomolecules (2021-present)

#### **RESEARCH ACTIVITIES**

#### **RESEARCH INTERESTS:**

The current and long-term objectives are to elucidate the pharmacology of transmembrane signaling pathways in cellular responses and disease processes. To this end, the following projects form the basis for an integrated approach towards this goal. My research efforts have consistently incorporated interactions with clinical faculty with a translational perspective. My current research focus is onto epigenetic histone modifications by ethanol and its relevance to ethanol induced cellular damage in liver subjected to chronic and binge ethanol in vivo.

#### **THESIS ADVISOR:**

The following thesis works were supervised or are being supervised:

1. William J. Morrison, Ph.D.; degree awarded 1988
2. Archie W. Thurston, Jr.; Ph.D. degree awarded 1992
3. Yue-Xin (Cindy) Zhu; M.Sc. degree awarded 1991
4. Sanjay Kansra; Ph.D. degree awarded 1995
5. Roberta Magai; M.Sc. degree awarded 2001

6. Travis Hillen; M.Sc. degree awarded 2000
7. Daniel (Yu-I) Weng; Ph.D. degree awarded 2001
8. Youn-Ju Lee, Ph.D. degree awarded 2003
9. Pil-Hoon Park, Ph.D. degree awarded 2005
10. Mahua Choudhury Ph.D. program, completed 2008
11. Taryn James Ph.D. program, completed 2011

**THESIS COMMITTEES:**

Served on Ph.D. thesis committee for:

(\* = as external examiner)

1. \*Dr. Evan Stubbs (Biochemistry)
2. \*Dr. Hse Mee Huang (Biochemistry)
3. \*Dr. T. Lin (Biochemistry)
4. \*Dr. Liu Yu (Physiology)
5. Dr. D.J. Park (Pharmacology)
6. Dr. Hung Wu (Pharmacology)
7. \*Dr. Song Zhu An (Biochemistry)
8. \*Dr. Scott L. Pratt (Animal Science)
9. \*Dr. David Grimm (Microbiology and Molecular Immunology)
10. Dr. Wan-Lin Yang (Pharmacology)
11. Dr. Binbin Chen (Pharmacology)
12. \*Dr. Carrie Waters (Vet. Biomed. Sci.)
13. Dr. David Bourdon (Pharmacology)
14. \*Dr. Jianfeng Xu (Biochemistry)
15. \*Dr. J. Bay (Vet Biomed. Sci.)
16. \*Dr. Shiming Shen (Biochemistry/Nutrition)
17. \*Dr. Yilong Shu (Biochemistry)
18. Dr. Jianzong Shen (Med. Pharm. and Physiol.)
19. Dr. Rebecca Miller (Med. Pharm. and Physiol.)
20. Dr. Allison Hollenbeck (Med. Pharm. and Physiol.)
21. \*Dr. Phullar Shelat (Neuroscience program)
22. Dr. Mozow Yusof (MPP) MD/PhD candidate
23. \*Dr. Brian Steffan (Biomed Sciences) PhD candidate
24. Dr. Rebecca Burkhalter PhD
25. Thomas Jurrissen (Nutr & Exec. Physiol) 2016-present
26. Jacqueline M. Otto (Clinical Psychology) 2016-2019
27. Varsha Srinivasan (Med Pharm Physiol) 2020-present

Served on M.Sc. thesis committee of:

1. Wu Ming Chu (Pharmacology)
2. Wan-Lin Yang (Pharmacology)
3. Jing Hung Wang (Biochemistry)
4. Roberta Magai (Pharmacology)
5. Travis Hillen (Pharmacology)

### **POSTDOCTORAL TRAINEES/VISITING SCIENTISTS:**

1. Dr. Animesh Dhar, Ph.D. (Research Associate/Research Assistant Professor); March 1988-1995.
2. Dr. A.K. Paul, Ph.D. (Research Associate; Fulbright Fellow); February 1989-September 1989
3. Dr. S. Fernandez-Gallardo (Research Associate; Spanish Government Scholar); October 1990-September 1991
4. Dr. Y.B. Tripathi (Research Associate; Government of India Biotechnology Fellow); October 1990-June 1991
5. Dr. M.A. Reddy (Research Associate); May 1993-1998
6. Dr. Annayya Aroor; January 2000-October 2001; June-July, 2003; Jan 2006-2011
7. Dr. Daniel Weng; January 2002-July 2002
8. Dr. Jee-Soo, Kim, August 2003-April 2005
9. Dr. Utpal Bhadra Summer 2004, April-June 2005
10. Dr. Youn Ju Lee, Sept. 2004-July 2007
11. Dr. Manika Bhadra, April -June 2005
12. Dr. Ravi Pandey, Sept. 2008- 2010.

### **TRAINING OF GRADUATE & MEDICAL STUDENTS IN RESEARCH STUDIES:**

The following pharmacology graduate/medical students were trained in my laboratory in research rotation:

1. Christopher Franklin
2. Randy Hoover
3. Paul Rittman
4. Cathy Wu
5. Robert Sexe (medical student)
6. Wan Lin Yang
7. Yue-Xin Zhu
8. Sanjay Kansra
9. Mike McFadden (medical student)
10. Brad Seyer
11. Yu-I Weng
12. Travis Hillen
13. Kurre Luber (medical student)
14. Nancy Picht
15. Youn-Ju Lee
16. Prithish Tosh (medical student)
17. Jeffrey Custer
18. Yun Bai
19. Pil-Hoon Park
20. Rebecca Miller
21. Shih-Hua Chen
22. Lana Bruney
23. Lauren Retzloff
24. Teresa Jackson
25. Shireen Mentor (Exchange student, Univ. Western Cape, South Africa)

26. Xuanyou Liu

**PARTICIPATION IN NATIONAL AND INTERNATIONAL MEETINGS:**

1. Biochemical Society meeting each year 1975-1979 in England.
2. Invited participant in "European Membrane Workshop," 1978, Nottingham, England.
3. Minisymposium on Signal Transduction, FASEB, 1983, Chicago.
4. Chilton International Conference on "Inositol and Phosphoinositides, January 1984, Dallas, Texas.
5. Second International Conference on "Platelet Activating Factor," October, 1986, Gatlinburg, Tennessee.
6. FASEB meeting (USA) each year since 1981.
7. Invited participant in Symposium on Platelet Membrane Receptor/Function, Washington, D.C., 1987.
8. Minisymposium on PAF, FASEB, Las Vegas, 1988.
9. Invited speaker, 3rd International Conference on PAF, Tokyo, Japan, May 1989.
10. Minisymposium on PAF, FASEB, Washington, D.C., 1990.
11. IUPHAR Satellite Meeting, "Advances in PAF Research," Paris, France, 1990.
12. International Symposium and NATO Workshop on "Phospholipids and Signal Transmission," Wiesbaden, Germany, May 28-June 1, 1991.
13. Invited speaker in International Conference on "PAF and PAF Antagonist" organized by IBC Conferences, Boston, March 26-27, 1992.
14. Sixth Congress of the International Society for Biomedical Research on Alcoholism (ISBRA), Bristol, England, June 21-26, 1992.
15. ISBRA Satellite Symposium on "Alcohol, Cell Membranes and Signal Transduction in Brain," Lund, Sweden, June 29-July 1, 1992.
16. Invited speaker, Fourth International Congress of PAF, Salt Lake City, Utah, September 22-25, 1992.
17. Invited speaker, International Symposium on Thrombosis and Hemostasis, Bombay, December 17-18, 1994.
18. Invited speaker, 5th PAF Congress, September 1995, Berlin, Germany.
19. Invited keynote speaker, 2nd International Conference on Atherosclerosis and Thrombosis, Bangalore, 1996.
20. Invited speaker, Satellite Symposium on "Ethanol and cell signaling" Research Society on Alcoholism, San Francisco, July 1997.
21. Invited speaker, 9th ISBRA Congress, June 1998, Copenhagen, Denmark
22. Guest speaker, International Conference on Thrombosis and Atherosclerosis, New Delhi, October 1998
23. Invited speaker, Novartis Foundation, London (UK) Sept., 2006
24. Invited speaker 3<sup>rd</sup> International symposium on Alcoholic Liver Disease & Cirrhosis Bilbao, Spain, July 2008.
27. Invited speaker ISBRA/RSA satellite symposium, Washington DC (June 2008)
28. Invited guest speaker, Indian Science Congress, Shillong, Jan 2009
29. Invited speaker: Epigenetics & Ethanol conference, Loyola Univ, Chicago, Nov 2011
30. Invited speaker, RSA symposium "Stem Cells & Epigenetics", San Francisco, 2012
31. Invited speaker, RSA satellite symposium, "Animal models for alcohol research", Orlando Florida, 2013.



32. Invited Speaker International Conference on ALPD, New Delhi, Nov 2013
33. Invited speaker in satellite symposium in RSA-ISBRA meeting, Seattle, June 2014
34. Invited speaker in the 1st MU Epigenetics Day, Nov 2014
35. Invited speaker, MU-Addiction Symposium, December 2018.

#### **SYMPOSIUM ORGANIZER/CHAIRPERSON:**

1. **Organizer and Chairman** of a FASEB (ASPET) Symposium on "Platelet activating factor receptor signal mechanisms," April 1991, Atlanta, Georgia.
2. **Chaired** a session on "PAF receptor and signaling mechanisms" in the 4th International Congress on PAF, September 1992, Salt Lake City, Utah
3. **Chaired** a plenary session of 5th PAF Congress, September 1995, Berlin, *Germany*.
4. Invited to **chair** 2nd International Conference on Atherosclerosis, Bangalore, 1996
5. **Chaired** a symposium on "Ethanol and protein kinases," 9th ISBRA Congress, *Denmark*, 1998
6. **Chaired** a symposium in the 6th PAF Congress, New Orleans, 1998
7. **Organizer and Chair** of a ISBRA symposium on "Ethanol and Lipid Metabolic Signalling" Yokohama, *Japan*, July 2000
8. Invited speaker at Satellite Symposium of ISBRA, Taipei, Taiwan, July 2000
9. **Co-Chair** Satellite Symposium, "Ethanol and Oxidative Stress Signaling," RSA meeting, Florida, June 2003.
10. **Organizer & Chair:** Symposium "Epigenetics & Ethanol: RSA meeting, Chicago 2007
11. **Organizer & Chair:** Symposium on "Are MAP Kinases good or bad for ethanol", RSA meeting, San Diego 2009.
12. **Organizer & Chair:** Symposium "Ethanol Metabolic Stress" RSA meeting, San Antonio, Texas June 2010.
13. **Organizer & Chair:** Symposium "Ethanol & Epigenetics", ISBRA Congress, Paris *France*, Sept 2010.
14. **Organizer/Chair:** Symposium "Binge drinking is injurious to liver". RSA 2011 meeting, Atlanta, 2011

### **PUBLICATIONS**

#### **REFEREED PAPERS:**

1. **Shukla, S.D.** and Turner, J.M. Preparation and properties of membranes from the gram-negative bacteria *Erwinia carotovora*. *Biochem. Soc. Trans.* 3, 756-758 (1975).
2. Clough, H.B., **Shukla, S.D.** and Turner, J.M. Biosynthetic utilization of ethanolamine by *Erwinia carotovora*. *Biochem. Soc. Trans.* 3, 769-772 (1975).
3. **Shukla, S.D.**, Billah, M.M., Coleman, R., Finean, J.B. and Michell, R.H. Modulation of the organization of erythrocyte membrane phospholipids by cytoplasmic ATP: The susceptibility of isotonic erythrocyte ghosts to attack by detergents and phospholipases C. *Biochim. Biophys. Acta* 509, 48-57 (1978).

4. **Shukla, S.D.**, Billah, M.M., Finean, J.B. and Michell, R.H. MgATP2-and the molecular organization of erythrocyte membrane. *Biochem. Soc. Trans.* 6, 285-286, 1978.
5. **Shukla, S.D.**, Berriman, J., Coleman, R., Finean, J.B. and Michell, R.H. Membrane protein segregation during release of microvesicles from human erythrocytes. *FEBS Lett.* 90, 289-292, 1978.
6. **Shukla, S.D.**, Coleman, R., Finean, J.B. and Michell, R.H. The use of phospholipase C to detect structural changes in membranes of human erythrocytes aged by storage. *Biochim. Biophys. Acta* 512, 341-349, 1978.
7. **Shukla, S.D.**, Green, C. and Turner, J.M. Protein, phospholipid distribution and fluidity in membranes of the Gram -ve bacteria *Erwinia carotovora*. *Biochem. Soc. Trans.* 6, 1347-1349, 1978.
8. **Shukla, S.D.**, Coleman, R., Finean, J.B. and Michell, R.H. Polyphosphoinositides in isolated preparations of human erythrocyte membrane glycoporphin. *Biochem. Soc. Trans.* 7, 358-359, 1979.
9. **Shukla, S.D.**, Coleman, R., Finean, J.B. and Michell, R.H. Are polyphosphoinositides associated with glycoporphin in human erythrocyte membrane? *Biochem. J.* 179, 441-444, 1979.
10. **Shukla, S.D.** and Turner, J.M. Microbial metabolism of amino alcohols: Biosynthetic utilization of ethanolamine for lipid synthesis by bacteria. *Biochem. J.* 186, 13-19, 1980.
11. **Shukla, S.D.**, Green, C. and Turner, J.M. Phosphatidylethanolamine distribution and fluidity in outer and inner membranes of Gram -ve bacteria *Erwinia carotovora*. *Biochem. J.* 188, 131-135, 1980.
12. Finean, J.B. and **Shukla, S.D.** Enzymes linked to phosphatidylinositol in plasma membranes. *Biochem. Soc. Trans.* 8, 43, 1980.
13. **Shukla, S.D.**, Coleman, R., Finean, J.B. and Michell, R.H. Selective release of plasma membrane enzymes from rat hepatocytes by a phosphatidylinositol specific phospholipase C. *Biochem. J.* 187, 227-280, 1980.
14. **Shukla, S.D.** and Hanahan, D.J. Differences in the pattern of attack of acidic, neutral and basic phospholipases A2 of *A.h. blomhofii* on human erythrocyte membranes: Problems in interpretation of phospholipid location. *Arch. Biochem. Biophys.* 209, 668-676, 1981.
15. Ekholm, J.E., **Shukla, S.D.** and Hanahan, D.J. Changes in cytosolic calmodulin activity of density (age) separated human erythrocytes towards Ca<sup>2+</sup>/Mg<sup>2+</sup> ATPase. *Biochem. Biophys. Res. Comm.* 103, 407-413, 1981.

16. **Shukla, S.D.** and Hanahan, D.J. Membrane alterations in cellular aging: Susceptibility of phospholipids in density (age) separated human erythrocytes to phospholipase A2. *Arch. Biochem. Biophys.* 214, 335-341, 1982.
17. **Shukla, S.D.** and Hanahan, D.J. Identification of domains of phosphatidylcholine in human erythrocyte plasma membranes: Differential action of acidic and basic phospholipases A2 from *A.h. blomhofii*. *J. Biol. Chem.* 257, 2908-2911, 1982.
18. **Shukla, S.D.** and Hanahan, D.J. AGEPC (platelet activating factor) induced stimulation of rabbit platelets: Effects on phosphatidylinositol, di- and tri-phosphoinositides and phosphatidic acid metabolism. *Biochem. Biophys. Res. Comm.* 106, 697-703, 1982.
19. **Shukla, S.D.**, Buxton, D., Olson, M.S. and Hanahan, D.J. AGEPC: A potent activator of hepatic phosphoinositide metabolism and glycogenolysis. *J. Biol. Chem.* 258, 19212-19214, 1983.
20. **Shukla, S.D.** and Hanahan, D.J. A transient rapid decrease in TPI upon stimulation of rabbit platelets with AGEPC. *Arch. Biochem. Biophys.* 227, 626-629, 1983.
21. **Shukla, S.D.** and Hanahan, D.J. AGEPC induced stimulation of rabbit platelets: correlation between PA level,  $^{45}\text{Ca}^{2+}$  uptake and  $^3\text{H}$  serotonin secretion. *Arch. Biochem. Biophys.* 232, 458-466, 1984.
22. Buxton, D., **Shukla, S.D.**, Hanahan, D.J. and Olson, M.S. Stimulation of hepatic glycogenolysis by AGEPC. *J. Biol. Chem.* 259, 1468-1471, 1984.
23. Fisher, R.A., **Shukla, S.D.**, Debuysere, M.S., Hanahan, D.J. and Olson, M.S. The effect of AGEPC on glycogenolysis and phosphatidylinositol-4,5-bisphosphate metabolism in rat hepatocytes. *J. Biol. Chem.* 259, 8685-8688, 1984.
24. Mostafa, M.H., Nelson, D.R., **Shukla, S.D.** and Hanahan, D.J. Rabbit platelet calcium ATPase differs from the human erythrocyte  $\text{Ca}^{2+}\text{Mg}^{2+}$ -ATPase in its response to three purified phospholipases A2, exogenous phospholipids and calmodulin. *Biochim. Biophys. Acta* 776, 259-266, 1984.
25. **Shukla, S.D.** Platelet activating factor stimulated formation of inositol triphosphate in platelets and its modulation by various agents including  $\text{Ca}^{2+}$ , indomethacin, CV3988 and forskolin. *Arch. Biochem. Biophys.* 240, 674-681, 1985.
26. **Shukla, S.D.**, Sergeant, S. and Kim, H.D.  $^3\text{H}$  Inositol incorporation into phosphoinositides of pig reticulocytes. *Biochim. Biophys. Acta* 821, 305-309, 1985.
27. Kim, H.D., Sergeant, S. and **Shukla, S.D.** Glucose transport in human platelets and its inhibition by forskolin. *J. Pharmacol. Exp. Ther.* 236, 585-589, 1986.

28. **Shukla, S.D.** Action of PI-specific phospholipase C on platelets: Non-lytic release of acetylcholinesterase, effect on thrombin and PAF induced aggregation. *Life Sci.* 38, 751-755, 1986.
29. **Shukla, S.D.**, Franklin, C. and Carter, M. Activation of phospholipase C in platelets by platelet activating factor and thrombin causes hydrolysis of a common pool of phosphatidylinositol-4,5-bisphosphate. *Biochim. Biophys. Acta* 929, 134-141, 1987.
30. Morrison, W.J. and **Shukla, S.D.** Desensitization of receptor coupled activation of phosphoinositide specific phospholipase C in platelets: Evidence for distinct mechanisms for platelet activating factor and thrombin. *Mol. Pharmacol.* 33, 58-63, 1988.
31. Jones, A.W., Geisbuhler, B.B., **Shukla, S.D.** and Smith, J.M. Altered biochemical and functional responses in aorta from hypertensive rats. *Hypertension* 11, 627-634, 1988.
32. **Shukla, S.D.**, Morrison, W.J. and Dhar, A. Desensitization of platelet activating factor stimulated protein phosphorylation in platelets. *Mol. Pharmacol.* 35, 409-413, 1989.
33. **Shukla, S.D.**, Morrison, W.J. and Klachko, D.M. Responses of platelet activating factor in human platelets stored and aged in plasma: Decrease in aggregation, phosphoinositide turnover and receptor affinity, *Transfusion* 29, 528-533, 1989.
34. Morrison, W.J., Dhar, A. and **Shukla, S.D.** Staurosporine potentiates platelet activating factor stimulated phospholipase C activity in rabbit platelets but does not block its desensitization. *Life Sci.* 45, 333-339, 1989.
35. Morrison, W.J. and **Shukla, S.D.** Antagonism of platelet activating factor receptor binding and stimulated phosphoinositide-specific phospholipase C. *J. Pharmacol. Exp. Ther.* 250, 831-835, 1989.
36. Campbell, W., Baker, S.F., **Shukla, S.D.**, Forrester, L.J. and Zahler, W.L. Bioconversion of leukotriene D4 by purified lung dipeptidase. *Biochim. Biophys. Acta* 1042, 107-112, 1990.
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#### BOOK CHAPTERS:

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