

Name : Dr. Smita Kulkarni
Designation : Scientist 'F'
Date of birth : 20/05/1959
Department : Virology
Email address : skulkarni@nariindia.org
Education Qualification :



Degree	Year	Institution & Location	Field of Study
Ph.D.	1990	Pune University, India	Microbiology
M.Sc.	1981	Marathwada University, India	Microbiology
B.Sc.	1978	Marathwada University, India	Microbiology

Areas of Interest

1. Virology and Molecular virology
 - HIV characterization
 - *In vitro* testing of indigenously developed anti-HIV drug and microbicide candidates
 - HIV and other viral co-infections
2. Immunology
 - HIV Neutralizing antibodies
3. HIV Clinical Trials

Awards and honours

1. International Scholarship Award, 21st International AIDS Conference, AIDS 2016 to be held in Durban, South Africa, 18-22 July 2016.
2. Travel Grant, Dept. of Science & Technology and Indian Council of Medical Research for attending 3rd Antiviral Congress, Amsterdam, The Netherlands, 2014
3. International Scholarship Award, International Microbicide Conference, Pittsburgh, USA, 2010.
4. International Scholarship Award, AIDS vaccine International Conference, Cape Town, South Africa, 2008.
5. Research Scholar, Duke University Medical Centre, Durham, USA, 2006.
6. International Scholarship Award, AIDS Vaccine International Conference, Montreal, Canada, 2005.
7. International Scholarship Award, 10th Conference on Retrovirus & Opportunistic Infection, Boston, MA, USA, 2003.
8. Fogarty AITRP Fellowship in HIV Immunology/Virology, Johns Hopkins University, Baltimore, MD; National Institutes of Health, Bethesda, MD; New York University Medical Centre, NY, USA, 2000.
9. Colombo Plan Health General Fellowship in HIV Plus Microbiology Screening (AIDS/Blood Screening Technology), Regional Blood Transfusion Centre, New Castle Upon Tyne; Edinburgh

University, Edinburgh and Dundee University, Dundee, 1992.

10. Training in Flow Cytometry, Becton Dickinson, San Jose, CA, USA, 1991.

Academic affiliations

1. Recognized Research Guide for M.Sc., M. Phil. and Ph. D. Microbiology, Pune University, Pune, India.
2. Recognized Research Guide for M. Sc., M. Phil. and Ph. D. Microbiology, Biotechnology and Biomedical Sciences, Symbiosis International University, Pune, India.
3. Recognized Research Guide for M. Sc., M. Phil. and Ph. D. Microbiology, Maharashtra University of Health Sciences, Nasik, India.

Membership of the National / International Committees

1. Microbicide Society of India (MSI).
2. Ex-Member, Translational Research and Drug Development (TRADD) Committee, ACTG, USA.
3. Ex-Member, Hepatitis Committee AIDS Clinical Trials Group (ACTG), USA.

Research experience

Post Held	Employer	Duration
Research Assistant	National Institute of Virology, Pune	1981 - 1987
Research Assistant	National Institute of Virology, Pune	1987 - 1990
Technical Officer	National Institute of Virology, Pune	1990 - 1992
Technical Officer	National AIDS Research Institute, Pune	1992 - 2000
Senior Research Officer	National AIDS Research Institute, Pune	2000 - 2005
Scientist D	National AIDS Research Institute, Pune	2005 - 2009
Scientist E	National AIDS Research Institute, Pune	2009 - 2014
Scientist F	National AIDS Research Institute, Pune	01-09-2014 - To date

1. 1981 - 1992: National Institute of Virology (NIV), Pune

1981 - 1987: Research Assistant, Dept. of Rickettsiology, NIV, Pune.

1987 - 1990: Research Assistant, Dept. of AIDS, NIV, Pune.

1990 - 1992: Technical Officer, Dept. of AIDS, NIV, Pune.

2. 1992 to date: National AIDS Research Institute (NARI), Pune.

1992 - 2000: Technical Officer, NARI, Pune.

2000 - 2005: Senior Research Officer, Dept. of Molecular Virology, NARI, Pune.

2005 - 2009: Scientist D, Dept of Molecular Virology, NARI, Pune.

2009 - 2014: Scientist E, Dept of Molecular Virology, NARI, Pune.

2014 - To date: Scientist F, Dept of Virology, NARI, Pune.

Achievements

1. HIV Virology and Molecular Virology

- Establishment of repository of Indian HIV-1 and HIV-2 strains.
- Isolation and characterization of Indian HIV-1, HIV-2 and recombinant strains.
- First report of HIV-2 isolation from India.
- Contribution to NIH ARRRP by donating recently transmitted HIV-1 strains.
- Development of *in vitro* anti-HIV testing platform including cervical explants and epithelial transwell models for indigenously developed drug/microbicide candidates.
- Testing of several herbal and synthetic preparations for anti-HIV activity under various projects as a support to Indian researchers.
- Establishment and successful participation in international quality assurance programmes for HIV-1 RNA estimation and High Risk Human Papillomavirus (HR-HPV) screening test.
- Establishment of CD4 and CD8 estimation.
- Establishment of assays for determining neutralizing antibody responses using GHOST and TZM-bl cell lines
- Characterization of neutralization responses and neutralization phenotypes in recent HIV-1 Infection

2. Rickettsiology

- Establishment of *in vitro* methods for developing rickettsial antigen using chick, mouse and human embryonic primary cultures and established cell lines.
- Establishment of an *in vitro* method for isolation and confirmation of *Coxiella burnetii* from acute infection in an animal model.

No. of Publications: 59

M.Sc. Students: 2

Ph.D. Fellows: 5

List of Publications:

Patents: 2

1. Triaminotriazine Picolinonitrile derivatives as potent Reverse Transcriptase inhibitor of HIV-1. (Publication No. WO 2016059647 A2) filed in India and Patent Cooperation Treaty (PCT/IN2015/000386) in collaboration with Shri Chhatrapati Shivaji College, Dr. Babasaheb Ambedkar Marathwada University, Auranagabad.

2. Microbiocides from plant extracts for protection against HSV-2 infection. (Publication No WO2013164858A1) filed in India and Patent Cooperation Treaty (PCT/IN2013 /000293) in collaboration with NCL, Pune.

Publications in scientific journals: 54

1. Durge A., Jadaun P., Wadhvani A., Chinchansure A., Said M., Thulasiram H., Joshi S. and **Kulkarni S.** 2016. **Acetone and methanol fruit extracts of *Terminalia paniculata* inhibit HIV-1 infection *in vitro*.** Nat. Prod. Res. Accepted recently.
2. Karade S., [Ghate M.](#), [Chaturbhuj D.](#), [Kadam D.](#), [Shankar S.](#), [Gaikwad N.](#), [Gurav S.](#), [Joshi R.](#), **Kulkarni S.**, [Kurle S.](#), [Paranjape R.](#), [Rewari B.](#), [Gangakhedkar R.](#) 2016. **Cross-sectional study of virological failure and multinucleoside reverse transcriptase inhibitor resistance at 12 months of antiretroviral therapy in Western India.** Medicine, **95**:e4886. doi: 10.1097/MD.0000000000004886.
3. Hajare R., **Kulkarni S.**, Thakar M. and Paranjape R. 2016. **Technology development and design of novel 1, 3, 5-tri substituted-1h-indole-2, 3-dione hiv-1 inhibitors with displays strategic nanomolar cytotoxicity.** World J. Pharm. & Pharm. Sci. **5** (6): 391-397.
4. Cohen M., Chen Y., McCauley M., Gamble T., Hosseinipour M., Kumarasamy N., Hakim J., Kumwenda J., Grinsztejn B., Pilotto J., Godbole S., Chariyalertsak S., Santos B., Mayer K., Hoffman I., Eshleman S., Piwowar Manning E., Cottle L., Zhang X., Makhema J., Mills L., Panchia R., Faesen S., Eron J., Gallant J., Havlir D., Swindells S., Elharrar V., Burns D., Taha T., Nielsen Saines K., Celentano D., Essex M., Hudelson S., Redd A., and Fleming T., **for the HPTN 052 Study Team.** 2016. **Antiretroviral Therapy for the Prevention of HIV-1 Transmission.** N. Engl. J. Med. **375**:830-9. DOI: 10.1056/NEJMoa1600693.
5. Jadaun P., **Kulkarni S.**, Yadav D., Khopkar P., Bisen P. 2016. **The Emerging Link between HIV Therapy and Diabetes.** J. Bone Marrow Res. **4** (2): 1000168 DOI:10.4172/2329-8820.1000168.
6. Karade S., Patil A., Ghate M., **Kulkarni S.**, Kurle S., Risbud A., Rewari B., Gangakhedkar R. 2016. **Limited HIV Pre-treatment Drug Resistance (PDR) Among Adults Attending Free Antiretroviral Therapy (ART) Clinic of Pune, India.** AIDS Research & Human Retroviruses, **32** (4):377-80.
7. Hajare R, **Kulkarni S**, Paranjape R. 2015. **Design Space Filling Model, Synthesis and Evaluation of Novel 2-Indolinone HIV-1 Inhibitors.** Int. J. Adv. Res. **3** (12):1332-1335.
8. Desai D. and **Kulkarni S.** 2015. **The Herpes Simplex Virus: Interplay between HSV, host and HIV.** Viral Immunology, **28** (10):546-555.
9. Thio C., Smeaton L., Hollabaugh K., Saulynas M., Hwang H., Saravanan S., **Kulkarni S.**, Hakim J., Nyirenda M., Iqbal H., Laloo U., Campbell T., Lockman S., Currier J. 2015. **Comparison of HBV-active HAART regimens in an HIV-HBV multinational cohort: outcomes through 144 weeks.** AIDS, **29** (10):1173-82.
10. Ghate M., Mehendale S., Meyer R., Umlauf A., Deutsch R., Kamat R., Thakar M., Risbud A., **Kulkarni S.**, et al. 2015. **The effects of antiretroviral treatment initiation on cognition in HIV-infected individuals with advanced disease in Pune, India.** J. Neurovirol., **21** (4):391-8.

11. Said M., Chinchansure A., Nawale L., Durge A., Wadhvani A., **Kulkarni S.**, Sarkar D. and Joshi S. 2014. **A new butenolide cinnamate and other biological active chemical constituents from *Polygonum glabrum*.** Nat. Prod. Res., **29** (22):2080-6.
12. Maselko M., Joshi R., Prescottta M., Talwar G., **Kulkarni S.** and Pastey M. 2014. **Basant, a polyherbal topical microbicide candidate inhibits different clades of both CCR5 and CXCR4 tropic, lab-adapted and primary isolates of HIV Virus-1 infection in vitro.** J. Virol. Antivir. Res. **3**:4. doi:10.4172/2324-8955.1000131.
13. Jadhav N., **Kulkarni S.**, Mane A., Kulkarni R., Palshetker A., Singh K., Joshi S., Risbud A., Kulkarni S. 2014. **Antimicrobial Activity of Plant Extracts against Sexually Transmitted Pathogens.** Nat. Prod. Res., **29** (16):1562-6.
14. Praveena P., Godse A., Pawar M., **Kulkarni S.** and Sudarsanam D. 2014. **In vitro anti-HIV activity studies on *Encostema littorale* (Lam) Raynal whole plants.** World J. Pharm. Res., **3** (6): 1343-1352.
15. Singh A., Yadav D., Yadav M., Dhamanage A., **Kulkarni S.**[§] and Singh R.K.^{§*}. 2014. **Molecular Modeling, Synthesis and Biological Evaluation of *N*-Heteroaryl Compounds as Reverse Transcriptase Inhibitors against HIV-1.** Chem. Biol. & Drug Des., **85** (3):336-47. [§]-Equal contribution.
16. Vanangamudi M., Makwana N., Suryawanshi R., Saxena R., Tripathi R., Paranjape R., **Kulkarni S.**[§], Katti S.^{§*}. 2014. **Rational design and synthesis of novel thiazolidin-4-ones as non-nucleoside HIV-1 reverse transcriptase inhibitors.** Bioorg. & Medicinal Chem., **22** (12): 3159-3170. [§]- Equal contribution.
17. Khopkar P., Sane S, Bichare S., Verma A., **Kulkarni S.** 2013. **Association of plasma viremia with HIV-1 RNA levels in cervicovaginal lavage secretions in HIV-1 seropositive ART naïve women from Pune, India.** J. Clin. Virol., **58** (4):730-2.
18. Khopkar P., Mallav V., Chidrawar S., **Kulkarni S.** 2013. **Comparative evaluation of the Abbott HIV-1 RealTime™ assay with the Standard Roche COBAS®Amplacor™ HIV-1 Monitor® Test, v1.5 for determining HIV-1 RNA levels in plasma specimens from Pune, India.** J. Virol. Methods. **191** (1):82-87.
19. Jennings C., Harty B., Granger S., Wager C., Crump J.A., Fiscus S.A., Bremer J.W. 2012. **Cross-platform analysis of HIV-1 RNA data generated by a multicenter assay validation study with wide geographic representation.** J. Clin. Microbiol., **50** (8):2737-47. (NARI HIV-1 RNA Quality assurance data used for cross-platform analysis, institute acknowledged).
20. Mane A., **Kulkarni S.**, Ghate M., Risbud A., Thakar M. 2012. **HIV-1 RNA shedding in the female genital tract is associated with reduced quantity of Lactobacilli in clinically asymptomatic HIV-positive women.** Diagn. Microbiol. & Infect. Dis., **75** (1): 112–114.
21. Thio C., Smeaton L., Saulynas M., Hwang H., Saravan S., **Kulkarni S.**, Hakim J., Nyirenda M., Iqbal H., Laloo U., Mehta A., Hollabaugh K., Campbell T., Lockman S., Currier J. 2012. **Characterization of HIV-HBV coinfection in a multinational HIV-infected cohort.** AIDS, **27** (2):191-201.

22. Hingankar N., Thorat S., Deshpande A., Rajasekaran S., Chandrasekar C., Kumar S., Srikantiah P., Chaturbhuj D., Datkar S., Deshmukh P., **Kulkarni S.**, Sane S., Reddy D., Garg R., Jordan M., Kabra S., Tripathy S., Paranjape R. 2012. **Initial virologic response and HIV drug resistance among HIV-infected individuals initiating first-line antiretroviral therapy at 2 clinics in Chennai and Mumbai, India.** *Clin. Infect. Dis.*, **54** Suppl 4:S348-54.
23. Murugesan V., Tiwari V., Saxena R., Tripathi R., Paranjape R., **Kulkarni S.**, Makwana N., Suryawanshi R., Katti SB. 2011. **Lead optimization at C-2 and N-3 positions of thiazolidin-4-ones as HIV-1 non-nucleoside reverse transcriptase inhibitors.** *Bioorg. & Medicinal Chem.*, **19** (22): 6919–6926.
24. Jadhav S., Tripathy S., **Kulkarni S.**, Chaturbhuj D., Ghare R., Bhattacharya J., Paranjape R. 2011. **Genetic conservation in gp36 transmembrane region sequences derived from Indian HIV-2 isolates,** *AIDS Research & Human Retroviruses*, **27** (12): 1337-1343.
25. Gupta A., Bhosale R., Kinikar A., Gupte N., Bharadwaj R., Kagal A., Joshi S., Khandekar M., Karmarkar A., Kulkarni V., Sastry J., Mawe V., Suryawanshi N., Thakar M., **Kulkarni S.**, Tripathy S., Sambarey P., Patil S., Paranjape R., Bollinger R., Jamkar A., Six week extended dose Nevirapine (SWEN) India study Team. 2011. **Maternal tuberculosis: A risk factor for mother to child transmission of human immunodeficiency virus.** *J. Infect. Dis.*, **203** (3):358-363.
26. Cohen M S., Chen YQ., McCauley M, Gamble T, Hosseinipour M, Kumarasamy N, Hakim J., Kumwenda J, Grinsztejn B, Pilotto J., Godbole S, Mehendale S, Chariyalertsak S, Santos B., Mayer K, Hoffman I, Eshleman S, Piwowar-Manning E, Wang L, Makhema J, Mills L., Bruyn Guy de, Sanne I., Eron J., Gallant J., Havlir D., Swindells S., Ribaud H., Elharrar V., Burns David, Taha Taha E., Nielsen-Saines K., Celentano D., Essex M. and Fleming T., for the **HPTN 052 Study Team**. 2011. Prevention of HIV-1 Infection with Early Antiretroviral Therapy. *N. Engl. J. Med.*, **365** (6):493-505.
27. **Kulkarni S.**, Lapedes A., Tang,H.Gnanakaran S., Daniels M., Zhang M., Bhattacharya T., Li M., Polonis V., McCutchan F., Morris L., Ellenberger D., Butera S., Bollinger R., Korber B., Paranjape R. and Montefiori D. 2009. **Highly complex neutralization determinants on a monophyletic lineage of newly transmitted subtype C HIV-1 Env clones from India.** *Virology*, **385** (2):505-20.
28. Rodriguez M., Ding M.' Ratner D.' Chen Y.' Tripathy S.' **Kulkarni S.**, Chatterjee R., Tarwater P., Gupta P. 2009. **High Replication Fitness and Transmission Efficiency of HIV-1 Subtype C from India: Implications for Subtype C Predominance.** *Virology*, **385** (2):416-424.
29. Jadhav S., Tripathy S., **Kulkarni S.**, Agnihotri K., Risbud A. and Paranjape R. 2009. **Molecular Phylogenetics of Nearly Full-Length HIV Type 2 envelope Gene Sequences from West India.** *AIDS Research & Human Retroviruses*, **25** (1):115-121.
30. Moorthy A., Gupta A., Bhosale R., Tripathy S., Sastry J., **Kulkarni S.**, Thakar M., Bharadwaj R., Kagal A., Bhore A., Patil S., Kulkarni V., Venkataramani V., Balasubramaniam U., Suryavanshi N., Ziemniak C., Gupte N., Bollinger R., Persaud D. for the India SWEN Clinical Trials Team. 2009. **Nevirapine resistance and breast milk HIV transmission: Effects of**

single and extended dose prophylaxis in subtype C HIV infected infants. *Plos One*, **4** (1): e4096.

31. **Kulkarni S.**, Tripathy S., Gangakhedkar R., Jadhav S., Agnihotri K., Sane S., Bollinger R. and Paranjape R. 2008. **Neutralizing antibody responses in recent seroconverters with HIV-1 subtype C infections in India.** *AIDS Research & Human Retroviruses*, **24** (9):1159-1166.
32. Rawal R., Tripathi R., **Kulkarni S.**, Paranjape R., Katti S., Pannecouque C. and De Clercq E. 2008. **2-(2,6-Dihalo-phenyl)-3-heteroaryl-2-ylmethyl-1, 3-thiazolidin-4-ones: Anti-HIV agents.** *Chem. Biol. Drug. Des.*, **72** (2):147–154.
33. Zore G B., Winston U., Surwase B., Meshram N., Sangle V., **Kulkarni S.**, Karuppayil S. 2008. **Chemoprofile and bioactivities of *Taverniera cuneifolia* (Roth) Arn: A wild relative and possible substitute of *Glycyrrhiza glabra* L.** *Phytomedicine*, **15** (4):292-300.
34. Rodriguez M., Chengli S., Ratner D., Paranjape R., **Kulkarni S.**, Chatterjee R., Gupta P. 2007. **Genetic and Functional Characterization of the LTR of HIV-1 Subtypes A and C Circulating in India.** *AIDS Research & Human Retroviruses*, **23** (11): 1428-33.
35. Lakhashe S., **Kulkarni S.**, Thakar M., Ghate M. and Paranjape R. 2007. **Extensive cross-reactive neutralizing antibody response in Indian patients with limited genetic diversity of HIV-1.** *Virology*, **359** (2):295-301.
36. Mehendale S., Ghate M., Kishor K., Sahay S., Gamble T., Godbole S., Thakar M., **Kulkarni S.**, Gupta A., Gangakhedkar R., Divekar A., Risbud A., Paranjape R. and Bollinger R. 2006. **Low HIV-1 incidence among married serodiscordant couples in Pune, India.** *J Acquir. Immune. Defic. Syndr*, **41** (3):371-373.
37. **Kulkarni S.**, Tripathy S., Agnihotri K., Jatkar N., Jadhav S., Umakanth W., Dhande K., Tondare P., Gangakhedkar R. and Paranjape R. 2005. **Indian primary HIV-2 isolates and relationship between V3 genotype, biological phenotype and coreceptor usage.** *Virology*, **337** (1):68-75.
38. Manocha M., Pal P., Chitralkha K., Thomas B., Tripathi V., Gupta S., Paranjape R., **Kulkarni S.**, Rao D. 2005. **Enhanced mucosal and systemic immune response with intranasal immunization of mice with HIV peptides entrapped in PLG microparticles in combination with Ulex Europaeus-I lectin as M cell target.** *Vaccine*, **23** (48-49): 5599-17.
39. Thakar M., Bhonge L., Lakhashe S., Kumar U. Sane S., **Kulkarni S.**, Mahajan B. and Paranjape Ramesh. 2005. Cytolytic T lymphocytes (CTLs) from HIV-1 subtype C-infected Indian patients recognize CTL epitopes from a conserved immunodominant region of HIV-1 Gag and Nef. *J. Infect. Dis.*, **192** (5):749-59.
40. Tripathy S., **Kulkarni S.**, Jadhav S., Agnihotri K., Jere A., Kurle S., Bhattacharya S., Singh K., Tripathy S. and Paranjape R. 2005. **Subtype B and subtype C HIV type 1 recombinants in the northeastern state of Manipur, India.** *AIDS Research & Human Retroviruses*, **21** (2):152-7.

41. Eshleman S., Hudelson S., Gupta A., Bollinger R., Divekar A., Gangakhedkar R., **Kulkarni S.**, Thakar M., Paranjape R. and Tripathy S. 2005. **Limited evolution in the HIV-1 pol region among acute seroconverters in Pune, India.** *AIDS Research & Human Retroviruses*, **21** (1):93-97.
42. Mehendale S., Bollinger R., **Kulkarni S.**, Stallings R., Brookmeyer R., Kulkarni S., Divekar A., Gangakhedkar R., Joshi S., Risbud A., Thakar M., Mahajan B., Kale V., Ghate M., Gadkari D., Quinn T., Paranjape R. 2002. **Rapid progression in Human Immunodeficiency Virus Type 1 infected seroconverters in India.** *AIDS Research & Human Retroviruses*, **18** (6): 1175-79.
43. Cecilia D., **Kulkarni S.**, Tripathy S., Gangakhedkar R., Paranjape R., Gadkari D. 2000. **Absence of coreceptor switch with disease progression in human immunodeficiency virus infections in India.** *Virology*, **271** (2):253-258.
44. **Kulkarni S.**, Tripathy S., Paranjape R., Mani N., Joshi D., Patil U. and Gadkari D. 1999. **Isolation and preliminary characterization of two HIV-2 strains from Pune, India.** *Ind J Med Res*, **109**:123-130.
45. Lole K., Bollinger R., Paranjape R., Gadkari D., **Kulkarni S.**, Novak N., Ingersoll R., Sheppard H. and Ray S. 1999. **Full-length Human Immunodeficiency Virus Type 1 genomes from subtype C-infected seroconverters in India, with evidence of intersubtype recombination.** *J. Virol*, **73** (1):152-160.
46. Gadkari D., Moore D., Shepard H., **Kulkarni S.**, Mehendale S. and Bollinger R. 1998. **Transmission of genetically diverse strains of HIV-1 in Pune, India.** *Indian J. Med. Res.*, **107**:1-9.
47. Paranjape R., **Kulkarni S.**, Chanda S., Mehendale S., Jawadekar S., Pratinidhi A. and Rodrigues J. 1997. **Evaluation of algorithms of anti-HIV antibody tests (without western blot) on sera from long distance truck drivers.** *Indian J. Commun. Med.*, **22** (2):54-57.
48. **Kulkarni S.**, Bhonde R., Padbidri V. 1995. **Comparative studies on the susceptibility of certain primary cultures to *Coxiella burnetii*.** *Indian J. Medical Microbiol.*, **13** (3): 145-149.
49. **Kulkarni S.**, Thakar M., Rodrigues J. and Banerjee K. 1992. **HIV-2 antibodies in serum samples from Maharashtra State.** *Ind. J. Med. Res.*, [A] **95**:213-215.
50. Thakar M., Rodrigues J., Randive S., **Kulkarni S.** and Banerjee K. 1991. **Circulating Immune complexes in healthy, HIV-antibody positive subjects.** *Ind. J. Med. Res.*, [A] **93**:57-61.
51. Randive S., Thakar M., **Kulkarni S.**, Sukumaran K., Gokhale N., Rodrigues J. and Banerjee K. **Prevalence of HIV-1 antibodies in patients attending Tuberculosis clinics in Pune.** 1991. *J. Assoc. Phy. Ind.*, **39** (5):427.
52. Banerjee K., Rodrigues J., Israel Z., **Kulkarni S.** and Thakar M. 1989. **Outbreak of HIV seropositivity among commercial plasma donors in Pune, India.** *Lancet*, **II**; 8655:166.
53. Padbidri V., Divekar A., **Kulkarni S.** and Rodrigues J. 1986. **A sporadic case of epidemic (louse born) typhus.** *J. Assoc. Phy. Ind.*, **34** (3):213-214.

54. **Kulkarni S.**, Bhonde R, Padbidri V. and Wagh U. 1985. **Multiplication of *Coxiella burnetii* in vitro in chick foetal membranes.** Ind. J. Parasitol, **9**:235-237.

Proceedings: 1

1. Padbidri V., Pant U., **Kulkarni S.** and Dhanda V. 1984. **Multiplication of *Coxiella burnetii* in *Culex bitaeniorhynchus* cell line.** Proc.III Intern. Symposium on "Rickettsiae and Rickettsial diseases" held at Smolenice. Czechoslovakia, 10-14 Sept. pp 235-240.

Book Chapters: Two

1. **Kulkarni S.** and Paranjape R. 2005. **Role of Non-human primates in HIV/AIDS research.** Review article in Book entitled "National Center for Primate Breeding and Research: Vision, Challenges and Opportunities" Edited by Dr. Chander P. Puri and Dr Nirmal K. Ganguly released on 9th Jan 2005, on the occasion of Foundation Stone laying ceremony of the Primate Centre, NIRRH, Mumbai. pg no: 435-454.
2. Paranjape R., Tripathy S. and **Kulkarni S.** 2000. **Direct evidence of HIV infection. HIV Testing Manual: Laboratory diagnosis, Biosafety and quality control.** Publ. National AIDS Control Organization, Ministry of Health and Family Welfare, Govt of India: 75-80.