

SANJAY G. REVANKAR, M.D.

ADDRESS

Division of Infectious Diseases
Department of Internal Medicine
Harper Hospital
3990 John R, 5 Hudson, Room 5933
Detroit, Michigan 48201
(313) 745-9649

EDUCATION

1984-87 B. A., Northwestern University, Evanston, IL

1987-91 M.D., University of Illinois at Chicago, Chicago, IL

TRAINING

1991-94 Internship/Residency in Internal Medicine, University of Michigan
Hospitals, Ann Arbor, MI

1994-97 Infectious Diseases Fellowship, University of Texas Health Science Center
San Antonio, TX

1997-99 Pfizer Mycology Fellowship, Fungus Testing Lab, University of Texas
Health Science Center at San Antonio, TX

FACULTY APPOINTMENTS

2006 - Associate Professor, Department of Internal Medicine,
Wayne State University School of Medicine, Detroit, MI

2005-2006 Associate Professor, Department of Internal Medicine,
University of Texas Southwestern Medical Center, Dallas, TX

1999 – 2005 Assistant Professor, Department of Internal Medicine, University of Texas
Southwestern Medical Center, Dallas, TX

HOSPITAL OR OTHER PROFESSIONAL APPOINTMENTS

2006-Present Staff Physician, Detroit Medical Center, Detroit, MI

1999 - 2006 Staff Physician, Medical Service, Dallas VA Medical Center

2002 – 2006 Dallas VA Information Management Committee

2004 – 2006 Veterans Integrated Service Network 17 Research Committee

MAJOR PROFESSIONAL SOCIETIES

Infectious Diseases Society of America, Member
American Society of Microbiology, Member

LICENSURE AND BOARD CERTIFICATION

Licensure - State of Michigan
Certified in Internal Medicine – 2004
Certified in Infectious Diseases – 1996

HONORS/AWARDS

ASM Infectious Diseases Fellow Travel Grant, 38th Interscience Conference on Antimicrobial Agents and Chemotherapy, 1998

Fellow Travel Grant, 4th Conference on Retroviruses and Opportunistic Infections, 1997

ASM Fellow Travel Grant, 35th Interscience Conference on Antimicrobial Agents and Chemotherapy, 1995

Student Research Training Program Fellowship, National Cancer Institute, National Institutes of Health, 1990

Alph Omega Alpha, Honor Medical Society, University of Illinois College of Medicine, 1990

Dean's List, College of Arts and Sciences, Northwestern University, 1984-87

National Merit Scholarship, Northwestern University, 1984-87

SERVICE

2006- present Wayne State Institutional Biosafety Committee

RESEARCH MENTORING:

Suneetha Narreddy, Infectious Diseases Fellow, 2007-2008

Dipti Agrawal, MD, Infectious Diseases Fellow, “Variables Affecting the Trailing Endpoint Phenotype in Antifungal Susceptibility Testing”, July 2000-June 2001.

REVIEWER

Texas Department of Health: “Potential Health Effects from Mold Exposure in Buildings” training course lecture

JOURNAL ACTIVITY – REVIEWER

Journal of Infectious Diseases
Clinical Infectious Diseases
Medical Mycology
Mycoses
Clinical Neurology and Neurosurgery
Pediatric Infectious Diseases Journal
Acta Dermato-Venereologica
FEBS Letters
Infections In Medicine

TEACHING

Research mentor, Suneetha Narreddy, Infectious Diseases Fellow, 2007-2008

Research mentored, Dipti Agrawal, MD, Infectious Diseases Fellow. “Variables Affecting the Trailing Endpoint Phenotype in Antifungal susceptibility Testing”, 2000-01.

UT Southwestern Medical Center:

Clinicopathologic Conference, Dallas VAMC – Jan 2000, Sept 2002, Feb 2004, Jan 2005

“Who’s afraid of *Stachybotrys*?” – Aug 2002, Internal Medicine Grand Rounds

“Antifungal therapy” – Nov 2000, Nov 2002, Nov 2003 at the UT Southwestern Internal Medicine Update Conference

“Zoonoses” – Dec 2004 for Medicine housestaff

“Medically Important Fungi” – May 2001, June 2003, Mar 2005 for Infectious Diseases fellows

“Rickettsia and Ehrlichia” – Jan 2000, Jan 2004 for Infectious Diseases fellows

“Diagnosis and treatment of systemic Fungal Infections” – Aug 2002, Jan 2004 for Medicine housestaff, Sept 2004 for Pediatric Infectious Diseases division

“Tick-borne Infections” – Dec 2000 for Medicine housestaff

“Endemic Mycoses” – Dec 2004 for 2nd year medical students

“Fungal Infections” – Oct 2003 for 2nd year medical students

“Fungal Infections in AIDS” – Oct 2000, Oct 2001, Oct 2002, Oct 2003, Apr 2005 for 2nd year medical students

Small group teaching sessions – Oct 2002, Oct 2003, Oct 2004 Medical Microbiology course for 2nd year medical students

Mycology lab instructor – Apr 2005 Medical Microbiology course for 2nd year medical students

University of Texas Health Science Center at San Antonio:

Infectious Diseases Case Study Group – 1996, 1997, 1998, Discussion Leader for 2nd year medical students

Internal Medicine Morbidity and Mortality Conference – Dec 1995, Jun 1997, Discussion Leader

GRANT SUPPORT

2001 VA VISN-17 start-up grant: “Antifungal Susceptibility and Epidemiology of Yeast Bloodstream Isolates”, \$100,000 for 2 years.

2000 Pfizer Unrestricted Educational Grant: “Trailing Endpoints in Antifungal Susceptibility Testing”, \$6,000.

PUBLICATIONS

Original observations in Refereed Journals:

1. Agrawal D, Patterson TF, Rinaldi MG, **Revankar SG**. Trailing end-point phenotype of *Candida* spp. in antifungal susceptibility testing to fluconazole is eliminated by altering incubation temperature. *J Med Microbiol.* 2007;56(Pt 7):1003-4.
2. Greenberg RN, Mullane K, van Burik JA, Raad I, Abzug MJ, Anstead G, Herbrecht R, Langston A, Marr KA, Schiller G, Schuster M, Wingard JR, Gonzalez CE, **Revankar SG**, Corcoran G, Kryscio RJ, Hare R. Posaconazole as salvage therapy for zygomycosis. *Antimicrob Agents Chemother.* 2006;50(1):126-33.
3. Lai WS, Amirkhan RH, **Revankar SG**. A case of gastrointestinal zygomycosis in a patient with gastric adenocarcinoma. *Infect Dis Clin Pract* 2005;13:1-3.

4. **Revankar SG**, Fu J, Rinaldi MG, Kelly SL, Keller SM, Wickes BL. Cloning and characterization of the lanosterol 14 α -demethylase (*ERG11*) gene in *Cryptococcus neoformans*. *Biochem Biophys Res Comm* 2004;324:719-28.
5. O'Donnell K, Sutton DA, Rinaldi MG, Magnon KC, Cox PA, **Revankar SG**, Sanche S, Geiser DM, Juba JH, van Burik JH, Padhye A, Anaissie EJ, Francesconi A, Walsh TJ, Robinson JS. Genetic diversity of human pathogenic members of the *Fusarium oxysporum* complex inferred from gene genealogies and AFLP analyses: evidence for the recent dispersion of a geographically widespread clonal lineage and nosocomial origin. *J Clin Microbiol* 2004;42:5109-20.
6. **Revankar SG**, Sutton DA, rinaldi MG. Primary central nervous system phaeohyphomycosis: a review of 101 cases. *Clin Infect Dis* 2004;38:206-16.
7. **Revankar SG**, Clinical implications of mycotoxins and *Stachybotrys*. *Am J Med Sci* 2003;325:262-74.
8. **Revankar SG**, Patterson JE, Sutton DA, Pullen R, Rinaldi MG. Disseminated phaeohyphomycosis: review of an emerging mycosis. *Clin Infect Dis* 2002;34:467-76.
9. Nucci M, Akiti T, Barreiros G, Silveira F, **Revankar SG**, Wickes BL, Sutton DA, Patterson TF. Nosocomial Outbreak of *Exophiala jeanselmei* Fungemia Associated with Contamination of Hospital Water. *Clin Infect Dis* 2002;34:1475-80.
10. Cardona-Castro N, **Revankar SG**, Ortiz P, Cuervo C, Kirkpatrick WR, McAtee RK, Patterson TF. Proteinase Detection, DNA Typing and Antimycotic Susceptibility of *Candida* Isolates from Colombian Women with Vulvovaginal Candidiasis. *Rev Iberoam Micol.* 2002;19:89-94.
11. Nucci M, Akiti T, Barreiros G, Silveira F, **Revankar SG**, Sutton DA, Patterson TF. Nosocomial Fungemia Due to *Exophiala jeanselmei* var. *jeanselmei* and a *Rhinocladiella* Species: Newly Described Causes of Bloodstream Infection. *J Clin Microbiol* 2001;39:514-18.
12. Al-Abdely HM, **Revankar SG**, Graybill JR. Disseminated *Mycobacterium simiae* infection in patients with AIDS. *J Infect* 2000;41:143-47.
13. **Revankar SG**, Gregg CR. Disseminated Cryptococcosis in an AIDS Patient Diagnosed by Examination of a Peripheral Blood Smear. *Eur J Clin Microbiol Infect Dis* 2000;19:887-88.
14. Sutton DA, Sanche SE, **Revankar SG**, Fothergill AW, Rinaldi MG. In Vitro Amphotericin B Resistance in Clinical Isolates of *Aspergillus terreus*, with a Head-to-Head Comparison to Voriconazole. *J Clin Microbiol* 1999;37:2343-45.
15. **Revankar SG**, Sutton DA, Sanche SE, Rao J, Zervos M, Dashti F, Rinaldi MG. *Metarrhizium anisopliae* as a cause of sinusitis in immunocompetent hosts. *J Clin Microbiol* 1999;37:195-98.

16. **Revankar SG**, Sanche SE, Dib OP, Caceres M, Patterson TF. Effect of Highly Active Anti-Retroviral Therapy (HAART) on Recurrent oropharyngeal Candidiasis in HIV-infected patients. *AIDS (letter)* 1998;12:2511-13.
17. Graybill JR, Montalbo E, Kirkpatrick WR, Luther MF, **Revankar SG**, Patterson TF. Fluconazole versus *Candida albicans*: a complex relationship. *Antimicrob Agents Chemo* 1998;42:2938-42.
18. **Revankar SG**, Kirkpatrick WR, McAtee RK, Dib OP, Fothergill AW, Redding SW, Rinaldi MG, Patterson TF. Interpretation of trailing endpoints in antifungal susceptibility testing using NCCLS methodology. *J Clin Microbiol* 1998;36(1):153-6.
19. Kirkpatrick WR, **Revankar SG**, McAtee RK, Lopez-Ribot JL, Fothergill AW, McCarthy DI, Sanche SE, Cantu R, Rinaldi MG, Patterson TF. Detection of *Candida dubliniensis* in oropharyngeal samples from HIV-infected patients in North America by primary CHROMagar *Candida* screening and susceptibility testing of isolates. *J Clin Microbiol* 1998;36:3007-12.
20. **Revankar SG**, Kirkpatrick WR, McAtee RK, Dib OP, Fothergill AW, Redding SW, Rinaldi MG, Hilsenbeck SG, Patterson TF. A randomized trial of continuous or intermittent therapy with fluconazole for oropharyngeal candidiasis in HIV-infected patients: Clinical outcomes and development of fluconazole resistance. *Am J Med* 1998; 105:7-11.
21. Kirkpatrick WR, McAtee RK, **Revankar SG**, Fothergill AW, McCarthy DI, Rinaldi MG, Patterson TF. Comparative evaluation of National Committee for Clinical Laboratory Standards broth macrodilution and agar dilution screening methods for testing fluconazole susceptibility of *Cryptococcus neoformans*. *J Clin Microbiol* 1998;36:1330-2.
22. **Revankar SG**, Clark RA. Infected cardiac myxoma: case report and literature review. *Medicine* 1998;77:337-44.
23. **Revankar SG**, Dib OP, Kirkpatrick WR, McAtee RK, Fothergill AW, Rinaldi MG, Redding SW, Patterson TF. Clinical evaluation and microbiology of oropharyngeal infection due to fluconazole resistant *Candida* in human immunodeficiency virus-infected patients. *Clin Infect Dis* 1998;26:960-3.
24. Lopez-Ribot JL, Kirkpatrick WR, McAtee RK, **Revankar SG**, Patterson TF. Cell wall proteinaceous components in isolates of *Candida albicans* and non-albicans species from HIV-infected patients with oropharyngeal candidiasis. *Rev Iberoam Micol* 1998;15:124-28.
25. **Revankar SG**, Kirkpatrick WR, McAtee RK, Dib OP, Fothergill AW, Redding SW, Rinaldi MG, Patterson TF. Detection and significance of fluconazole resistance in oropharyngeal candidiasis in human immunodeficiency virus-infected patients. *J Infect Dis* 1996;174:821-7.

26. Patterson TF, **Revankar SG**, Kirkpatrick WR, Dib OP, Fothergill AW, Redding SW, Sutton DA, Rinaldi MG. Simple method for detecting fluconazole-resistant yeasts with chromogenic agar. *J Clin Microbiol* 1996;34(7):1794-97.
27. Patterson TF, Kirkpatrick WR, **Revankar SG**, McAtee RK, Fothergill AW, McCarthy DI, Rinaldi MG. Comparative evaluation of macrodilution and chromogenic agar screening for fluconazole susceptibility of *Candida albicans*. *J Clin Microbiol* 1996;34:3237-39.
28. **Revankar SG**, Applegate AL, Markovitz DM. Delirium associated with acyclovir treatment in a patient with renal failure. *Clin Infect Dis* 1995;21(2):435-6.
29. Tiballi RN, He X, Zarins LT, **Revankar SG**, Kauffman CA. Use of a colorimetric system for yeast susceptibility testing. *J Clin Microbiol* 1995;33(4):915-7.
30. Walsh TJ, Whitcomb PO, **Revankar SG**, Pizzo PA. Successful treatment of hepatosplenic candidiasis through repeated cycles of chemotherapy and neutropenia. *Cancer* 1995;76:2357-62.
31. Welage LS, Carver PL, **Revankar SG**, Person C, Kauffman CA. Alterations in Gastric Acidity in Patients Infected with Human Immunodeficiency Virus. *Clin Infect Dis* 1995;21:1431-8.

Multicenter Study Participant:

1. Open-label study of Tigecycline for treatment of infections due to resistant Gram-negative organisms – Sanjay Revankar, PI. Wyeth Pharmaceuticals Research.

Books and Chapters:

1. **Revankar SG**. Fungal infections. In: Gregg CR, Nassar N, Keiser P, editors. Parkland Pocket Guide to HIV Care. 3rd Ed., pp. 171-6.
2. **Revankar SG**, Graybill JR, Patterson TF. Anti-fungal agents and anti-fungal susceptibility testing. In: Hay R, Merz W, editors. Topley and Wilson's Microbiology and Microbial Infections: Medical Mycology. 10th ed. London: Arnold Publishers (in press).
3. **Revankar SG**, Graybill JR. Antifungal therapy. In: Anaissie EJ, McGinnis MR, Pfaller MA, editors. Clinical Mycology. Philadelphia: Elsevier Science; 2002, Chapter 7.
4. Graybill JR, **Revankar SG**, Patterson TF. Anti-fungal agents and anti-fungal susceptibility testing. In: Collier L, editor. Topley and Wilson's Microbiology and Microbial Infections: Medical Mycology 9th ed. London: Arnold Publishers; 1997. Vol. 4, Chapter 9.
5. Nath SK, **Revankar SG**. Problem-based Microbiology. Elsevier Publishers (in press).

Case Reports

Revankar SG, Hasan MS, Smith JW. Cure of disseminated zygomycosis with cerebral involvement using high dose liposomal amphotericin B and surgery. *Med Mycol.* 2007;45:183-185.

Invited Articles

1. Sobel JD, Revankar SG. Echinocandins--first-choice or first-line therapy for invasive candidiasis? *N Engl J Med.* 2007;356:2525-6.
2. Revankar SG. Dematiaceous fungi. *Mycoses.* 2007;50:91-101.
3. Revankar SG. Phaeohyphomycosis. *Infect Dis Clin North Am.* 2006;20:609-20. Review.
4. Revankar SG. Therapy of Infections caused by dematiaceous fungi. *Expert Rev Anti-Infect Ther* 2005;3:601-612.
5. Revankar SG. Dematiaceous fungi. *Sem Resp Crit Care Med* 2004;25:183-190.
6. Revankar SG, Patterson TF. Aspergillus and Candida infections in bone marrow transplantation: Progress and controversies. *Infect Dis Clin Prac* 1997;6:506-12.
7. Al-Abdely H, Revankar SG, Graybill JR. Lipid formulations of amphotericin B. *Semin Resp Crit Care Med* 1997;18:289-99.

INVITED LECTURES

1. "Dematiaceous fungi" – 44th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, Nov 2004
2. "Update on Candidiasis" – Medicine Grand Rounds: Annual McBee lectureship, Baylor Medical Center, Dallas, Jun 2004
3. "Invasive Phaeohyphomycosis: The Emerging Menace of the 'Black' Fungi" – 14th Focus on Fungal Infections Meeting, New Orleans, March 2004
4. "Phaeohyphomycosis" – 15th Congress of the International Society for Human and Animal Mycology, San Antonio, May 2003
5. "Who's Afraid of *Stachybotrys*?" – Association for Professionals in Infection Control and Epidemiology, Arlington, Oct 2002
6. Symposia "Mycoses of Increasing Significance" – Co-chairperson, 15th Congress of the International Society for Human and Animal Mycology, San Antonio, May 2003

PRESENTATIONS - 1995

Revankar SG. Kirkpatrick WR. McAtee RL. Dib OP, Fothergill AW, Redding SW, Redding SW, McGough DA, Rinaldi MG, Patterson TF. Detection of fluconazole resistant yeasts with chromogenic agar. Presented at the 35th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 1995, San Francisco, CA.

Revankar SG. Kirkpatrick WR. Fothergill AW, Patterson TF. Agar dilution screening for fluconazole resistant yeasts. Presented at the 95th General Meeting of the American Society for Microbiology, May 1995, Washington, DC.

PRESENTATIONS – 1996

Revankar SG, Kirkpatrick WR, McAtee RK, Dib OP, Fothergill AW, Redding SW, Rinaldi MG, Patterson TF. Development of Fluconazole Resistance with Continuous vs. Intermittent Therapy in Oropharyngeal Candidiasis in HIV-infected Patients. Presented at the 34th Infectious Diseases Society of America Annual Meeting, September 1996, New Orleans, LA.

Revankar SG, Kirkpatrick WR, McAtee RK, Dib OP, Fothergill AW, Redding SW, McGough DA, Rinaldi MG, Patterson TF. Prevalence of Fluconazole resistance in oropharyngeal candidiasis in HIV-Infected patients. Presented at the 3rd Conference on Retroviruses and Opportunistic Infections, January 1996, Washington, DC.

PRESENTATIONS – 1997

Revankar SG, Kirkpatrick WR, McAtee RK, Dib OP, Fothergill AW, Rinaldi MG, Patterson TF. Correlation of predominance of fluconazole-resistant isolates and response to therapy in recurrent oropharyngeal candidiasis in HIV-infected patients. Presented at the 35th Infectious Diseases Society of America Annual Meeting, September 1997, San Francisco, CA.

Revankar SG, Kirkpatrick WR, McAtee RK, Rinaldi MG, Patterson JE, Patterson TF. Trailing endpoints in antifungal susceptibility testing: Comparison of NCCLS and agar dilution with RFLP analysis. Presented at the 97th General Meeting of the American Society for Microbiology, May 1997, Miami Beach, FL.

Revankar SG, Dib OP, Kirkpatrick WR, McAtee RK, Fothergill AW, Rinaldi MG, Redding SW, Patterson TF. Clinical Evaluation and Microbiology of Fluconazole Resistant Oropharyngeal Candidiasis. Presented at the 4th Conference on Retroviruses and Opportunistic Infections, January 1997, Washington, DC.

PRESENTATIONS – 1998

Revankar SG, Sutton DA, Sanche SE, Rao J, Zervos M, Dashti F, Rinaldi MG. *Metarrhizium anisopliae* as a Cause of Sinusitis in Immunocompetent Hosts. Presented at the 98th General Meeting of the American Society for Microbiology, May 1998, Atlanta, GA.

Sanjay G. Revankar, M.D.

Curriculum Vitae

Page 10

Revankar SG, Sanche SE, Dib OP, Caceres M, Patterson TF. Effect of Highly Active Anti-retroviral Therapy (HAART) on Recurrent Oropharyngeal Candidiasis in HIV-infected patients: A Complex Relationship. Presented at the 5th Conference on Retroviruses and Opportunistic Infections, February 1998, Chicago, IL.

PRESENTATIONS – 2000

Keller SM, **Revankar S**, Rinaldi MG, Woodlee GL, Wickes BL. Isolation of the *Cryptococcus neoformans* ERG11 Gene. Presented at the 100th General Meeting of the American Society for Microbiology, May 2000, Los Angeles, CA.

PRESENTATIONS – 2001

Agrawal D, Patterson TF, Rinaldi MG, **Revankar SG**. Variables Affecting the Trailing Endpoint Phenotype in Antifungal Susceptibility Testing. Presented at the 101st General Meeting of the American Society for Microbiology, May 23, 2001, Orlando, FL

PRESENTATIONS – 2002

Revankar SG, Dempsey W, Tioutiounnik N, Gregg CR. Candidemia and Tolerance to Fluconazole: A Case-Control Study. Presented at the 40th Infectious Diseases Society of America Annual Meeting, October 25, 2002, Chicago, IL.

PRESENTATIONS – 2003

Revankar SG, Dempsey W, Tioutiounnik N. The presence of melanin in *Rhizopus microsporus* var. *rhizopodoformis*. Presented at the 103rd General Meeting of the American Society for Microbiology, May 20, 2003, Washington, DC.

PRESENTATIONS - 2004

Revankar SG, Revankar VS, Hasan MS. Long-term follow-up of hospitalized patients with candiduria. Presented at the 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, October 31, 2004, Washington, DC.

Hall RG, **Revankar SG**. Time to positivity of Candida blood cultures. Presented at the 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, October 30, 2004, Washington, DC.