

*CURRICULUM VITAE*

Current to March 2014

**Dr. George G. ZHANEL, FCCP****PERSONAL INFORMATION**

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Birth Date:	April 18, 1962		
Birth Place:	Olomouc, Czechoslovakia		
Marital Status:	Married (2 sons Stefan-1992 and Michael-1994)		

**ACADEMIC QUALIFICATIONS**

1994	Ph.D. in Medical Microbiology University of Manitoba Faculty of Medicine Winnipeg, Manitoba, Canada
1986	Doctor of Clinical Pharmacy (magna cum laude) University of Minnesota Minneapolis, Minnesota, USA

**CURRENT POSITIONS**

2013-Present	Course Leader – Infectious Diseases/Medical Microbiology, Undergraduate Medical Education (UGME), Faculty of Medicine, University of Manitoba, Winnipeg, Canada
2006-Present	Director - Canadian Antimicrobial Resistance Alliance (CARA), Faculty of Medicine, University of Manitoba, Winnipeg, Canada
2002-Present	Professor, Department of Medical Microbiology/Section of Infectious Diseases, Faculty of Medicine, University of Manitoba, Winnipeg, Canada
1994-Present	Coordinator - Antibiotic Resistance Program, Section of Infection Control, Department of Medicine, Health Sciences Centre, Winnipeg, Canada

**PREVIOUS POSITIONS**

- 1996-2006 Chair - Antimicrobial Resistance Research Group, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada
- 1999-2002 Associate Professor, Department of Medical Microbiology/Section of Infectious Diseases, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada
- 1999-2002 Professor, Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada
- 1994-1999 Assistant Professor, Department of Medical Microbiology/Section of Infectious Diseases, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada
- 1994-1999 Associate Professor, Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada
- 1994-1997 Head - Division of Clinical Sciences and Practice, Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada.
- 1990-1994 Doctor of Philosophy Candidate, Department of Medical Microbiology, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada
- 1989-1990 Postdoctoral Research Fellow, Department of Medical Microbiology, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada
- 1987-1994 Assistant Professor, Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada
- 1987-1989 Clinical Instructor, St. Boniface General Hospital, Winnipeg, Manitoba, Canada
- 1986-1987 Clinical Specialist in Infectious Diseases, Health Sciences Centre, Winnipeg, Manitoba, Canada

**ADMINISTRATIVE POSITIONS**

- 1998-1999 Acting Dean, Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada
- 1997-1999 Associate Dean Research, Faculty of Pharmacy, University of Manitoba, Winnipeg, Manitoba, Canada

**ADDITIONAL TRAINING**

- 1996 Animal Infection Models (murine models of pneumonia, tissue cage, subcutaneous thigh and peritonitis, rabbit models of meningitis and endocarditis) Antimicrobial Chemotherapy Workshop, Reykjavik, Iceland.
- 1992 BRL Recombinant DNA Techniques Workshop, University of Manitoba, Winnipeg, Manitoba, Canada
- 1990 Training in Dr. William Craig's Laboratory, Madison, Wisconsin. "The postantibiotic

1990 Training in Dr. John Hopkin's Laboratory, Madison, Wisconsin. "Urinary tract infection in a mouse model".

## TEACHING EXPERIENCE

1987 - Present **University of Manitoba, Faculty of Medicine**

### **Medicine I** – Block 1 Infectious Diseases Session leader, 2004-Present

- Antibiotic concepts, cell wall active antibiotics, protein synthesis inhibitors, other antibiotics, antibiotic resistance, antibiotic applications, pathogenesis, immune system, vaccines, normal microbiota, introduction to microbes, Enterobacteriaceae, Staphylococci, Streptococci, infectious principles
- Tutorials on normal human microbiota, *S. aureus*, *S. pyogenes*, *E. coli*, Tuberculosis/antitubercular agents, viral infections/antivirals, infection prevention/public health, fungal infections/antifungals, parasitic infections/antiparasitics
- Infectious Diseases Laboratory Session, 1991-1995  
Normal microbiota, disinfectants, sterilizers, antiseptics, vaccines
- Defense Mechanisms and Therapeutics, 2000 - 2004

Antibiotic concepts, cell wall active antibiotics, protein synthesis inhibitors, other antibiotics, antibiotic resistance, antibiotic applications, disinfectants, sterilizers, antiseptics, vaccines

- Block 3 Infectious Diseases course director, 2009-Present

Viral infections/antivirals, influenza, respiratory infections, infections in travellers and HIV/AIDS

### **Medicine II** - Infectious Diseases, 1993-1999.

- Antibiotic concepts, cell wall active antibiotics, protein synthesis inhibitors, other antibiotics, antibiotic resistance, antibiotic applications, viral infections/antivirals, preservatives, disinfectants, sterilizers, antiseptics, topical antibiotics, antibiotics in pregnancy

### **Medicine III** - Mini-Hospital Microbiology Laboratory Session, 1991-1995

- Therapeutics in Infectious Diseases, therapeutics in pregnancy and lactation, four tutorials on antibiotic use in the treatment of infectious diseases, 1993-Present.
- Infectious Diseases/Antibiotic Review 2003-present.  
Review of antibiotics and their use in the treatment of common infectious Diseases, new vaccines

### **Medicine IV** - Infectious Diseases/Antibiotic Review 2003-present.

- Review of antibiotics and their use in the treatment of common infectious diseases

### **Infectious Diseases Postdoctoral Fellows** - 2002-present

Clinical Infectious Diseases Lecture Series

- Review of commonly used antibiotic classes
- New and investigational antimicrobials
- preservatives, disinfectants, sterilizers, antiseptics

**Internal Medicine/Emergency Residents - 2007-present**

Clinical Infectious Diseases Lecture Series

- Antibiotic resistant infections
- New antibiotics

**Department of Pharmacology and Therapeutics**

Pharmacology 89.713, 1995-Present

One 3 hour seminar on cellular and molecular mechanisms of antimicrobial action

Pharmacology 2100, 1995-2013

Principles of therapy, penicillins/cephalosporins, carbapenems, chloramphenicol, tetracyclines/glycylcyclines, glycopeptides/lipopeptides, aminoglycosides, quinolones, macrolides/ketolides, monobactams, oxazolidinones, polymyxins, antitubercular drugs, sulfonamides and antifolates, antimicrobials with special indications, antibiotics in pregnancy and lactation, topical antibiotics, antiparasitic agents, preservatives, disinfectants, sterilizers, antiseptics,

New vaccines

Pharmacology 4040, 2009-Present

Antimicrobial selection, antimicrobial resistance

**Department of Medical Microbiology**

The Molecular Basis of Antibiotic Action MMC 7160, 1996-Present

Course Director

Eight 3 hour tutorials on the cellular and molecular mechanisms of action and resistance of antimicrobials, antivirals and agents with antimicrobial activity including preservatives, disinfectants, sterilizers, antiseptics

Microbial Pathogenicity MMC 7050, 2004-Present

Antibiotic resistance

Two 3 hour lecture/tutorials on the cellular and molecular mechanisms of antibiotic action/resistance.

Ecology of Infectious Diseases MMC 7220, 2010-Present

Introduction to infectious diseases

Two hour lecture/tutorial on the principles and practice of infectious diseases.

**Antibiotics in Infectious Diseases 1987-1989**

Course Director, Infectious Diseases Fellows, Section of Infectious Diseases/Medical Microbiology, University of Manitoba

Principles of antimicrobial chemotherapy, treatment of common infections, penicillins, cephalosporins, carbapenems, monobactam, aminoglycosides, fluoroquinolones, macrolides, glycopeptides, sulfonamides, tetracyclines, agents with antimicrobial activity including non-traditional antimicrobials, preservatives, disinfectants, sterilizers, antiseptics, antifungals, antivirals, antiparasitics, antitubercular agents, new vaccines

**Continuing Education/Medical Microbiology**, 1989, Course Instructor, Certificate in Infection Control in Health Care Program - Antimicrobial Pharmacology Section, University of Manitoba – Principles of infection prevention and agents/systems used for infection prevention

**University of Manitoba, Faculty of Science**

**Microbiology - Mechanisms of Microbial Diseases** (MBIO3010), 1993-Present

Mechanism of action and resistance of: cell wall active antibiotics, protein inhibitors, other antibiotics, antiviral agents, antifungal agents

**University of Manitoba, Faculty of Pharmacy**

**Clinical Pharmacy Tutorials** 46.438, 1987-1991

Introduction, thromboembolism and cerebrovascular disease, angina pectoris/myocardial infarction, congestive heart failure, review tutorial, hypertension and hypertensive emergencies, congestive heart failure, peptic ulcer disease, rheumatoid arthritis, urinary tract infection, respiratory tract infection, eye/ear/nose and throat infections, clinical toxicology

**Therapeutics** 46.435, 1987-1991

Arrhythmias and antiarrhythmic agents (2 lectures), principles of oncology & chemotherapy (4 lectures), AIDS - acquired immunodeficiency syndrome

**Antibiotics in Infectious Diseases** 46.443, 1991-1994; 46.341, 1994-1998

Course Director

Introduction to microbiology, infectious diseases and the microbiology laboratory, penicillins, cephalosporins, other beta-lactams, vancomycin, aminoglycosides, fluoroquinolones, sulfonamides, tetracyclines, antiviral agents, antifungal agents, antitubercular agents, antiparasitic agents, agents used for urinary tract infections, treatment of HIV/AIDS, treatment of respiratory infections, treatment of ear infections, prevention and treatment of eye infections, prevention and treatment of dental infections, prophylaxis for travelers, treatment of viral infections, mechanisms of antibiotic resistance, antibiotics in pregnancy and lactation, agents with antimicrobial activity including non-traditional antimicrobials, preservatives, disinfectants, sterilizers, antiseptics, new vaccines

**Professional Practice II** 46.441, 1987-1993

Course coordinator for hospital dispensing section

**Drug Induced Diseases** 46.451, 1995-1996

Course Director

Thirteen 3 hour seminars/tutorials regarding issues in infectious diseases therapeutics.

**Drug Information** 46.342, 1995-1996

Three 2 hour seminars/tutorials regarding drug literature evaluation

**Advanced Topics: Antibiotics and the Treatment of Infectious Diseases** 46.709, 1996-1998

Thirteen 3 hour seminars/tutorials regarding infectious diseases therapeutics issues.

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