

## CURRICULUM VITAE

**NAME:** Dziarski, Roman

**OFFICE ADDRESS:** Department of Microbiology and Immunology  
Indiana University School of Medicine–Northwest  
3400 Broadway, Gary, IN 46408  
E mail: rdziar@iun.edu

### EDUCATION

1973-1977 Ph.D. - Microbiology and Immunology  
National Institute of Hygiene, Warsaw, Poland

1972-1973 English (non-degree program)  
West London College, London, England

1971-1972 M.Sc. - Microbiology and Genetics  
University of Warsaw, Warsaw, Poland

1967-1971 B.Sc. - Biology and Microbiology  
University of Warsaw, Warsaw, Poland

### ACADEMIC APPOINTMENTS

2021-present Professor Emeritus  
Department of Microbiology and Immunology,  
Indiana University School of Medicine–Northwest, Gary, Indiana

1991-2021 Professor (tenured)  
Department of Microbiology and Immunology,  
Indiana University School of Medicine–Northwest, Gary, Indiana

1988-2021 Full Member  
Indiana University Graduate School, Bloomington, Indiana

1985-1991 Associate Professor  
Department of Microbiology and Immunology,  
Northwest Center for Medical Education,  
Indiana University School of Medicine, Gary, Indiana

1981-1985 Associate Professor  
Department of Microbiology, Immunology and Pathology,  
Pennsylvania College of Podiatric Medicine, Philadelphia, Pennsylvania

1978-1981 Assistant Professor  
Department of Microbiology, Immunology and Pathology,  
Pennsylvania College of Podiatric Medicine, Philadelphia, Pennsylvania

1977-1978            Research Associate and Assistant Professor  
Department of Microbiology, Immunology and Pathology,  
Pennsylvania College of Podiatric Medicine, Philadelphia, Pennsylvania

1973-1977            Research Associate  
Department of Bacteriology,  
National Institute of Hygiene, Warsaw, Poland

## GRANTS, FELLOWSHIPS AND AWARDS

2016-2020    Principal Investigator  
National Institute of Allergy and Infectious Diseases, NIH, R01 AI120962 Grant:  
Antibacterial activity of peptidoglycan recognition proteins, TDC: \$1,000,000  
(Total cost: \$1,571,250)

2016-2021    Principal Investigator  
Joseph A. Negri Trust Award: Laboratory for HIV Research, TDC: \$750,000

2016-2018    Principal Investigator  
US Department of Defense Discovery Award PR150219: Control of lung  
inflammation by microbiome and peptidoglycan recognition protein, TDC:  
\$200,000 (Total cost: \$312,000)

2015-2017    Investigator  
US Department of Defense Discovery Award PR14181: Role of bactericidal  
peptidoglycan recognition proteins in regulating gut microbiota and obesity, TDC:  
\$200,000 (Total cost: \$312,000), Principal Investigator: Dipika Gupta

2013-2015    Principal Investigator  
Indiana University School of Medicine, Research Enhancement Grant:  
Mechanism of pathogenic activity of peptidoglycan: role of *Pglyrp3* in asthma,  
TDC: \$40,000

2007-2014    Principal Investigator  
National Institute of Allergy and Infectious Diseases, NIH, R01 AI028797 Grant:  
Mechanism of pathogenic activity of peptidoglycan, TDC: \$1,250,000 (Total cost:  
\$1,893,750)

2008-2013    Principal Investigator  
National Institute of Allergy and Infectious Diseases, NIH, R01 AI073290 Grant:  
Mechanism of antimicrobial activity of peptidoglycan recognition proteins, TDC:  
\$1,000,000 (Total cost: \$1,510,000)

2003-2008    Principal Investigator  
National Institute of Allergy and Infectious Diseases, NIH, U01 AI056395 Grant:  
Antibacterial peptidoglycan recognition proteins, TDC: \$1,125,000 (Total cost:  
\$1,693,125)

- 2002-2007 Principal Investigator  
National Institute of Allergy and Infectious Diseases, NIH, R01 AI028797 Grant: Mechanism of pathogenic activity of peptidoglycan, TDC: \$1,125,000 (Total cost: \$1,693,125)
- 2006-2008 Principal Investigator  
Joseph A. Negri Trust Award: Laboratory for HIV Research, TDC: \$247,000
- 2003 Principal Investigator  
Northwest Center Medical Services Corporation and Northwest Center for Medical Education, Matching Equipment Grant: Purchase of ABI Prism 7000 Sequence Detection System (real time thermal cycler), TDC: \$17,250
- 1997-2002 Principal Investigator  
National Institute of Allergy and Infectious Diseases, NIH, R01 AI028797 Grant: Mechanism of pathogenic activity of peptidoglycan, TDC: \$834,709 (Total cost: \$1,277,105)
- 1999-2000 Sponsor/Project Director  
Postdoctoral Fellowship from Immune Deficiency Foundation to Dr. Chao Liu to work in Dr. Dziarski's lab on the project: The significance of peptidoglycan-recognition protein (PGRP) in innate immunity and primary immune deficiency, TDC: \$25,000
- 1992-1997 Principal Investigator  
National Institute of Allergy and Infectious Diseases, NIH, R01 AI028797 Grant: Mechanism of pathogenic activity of peptidoglycan, TDC: \$568,400 (Total cost: \$869,652)
- 1992-1995 Principal Investigator  
American Heart Association (National) Grant (#92006030): Structure and function of peptidoglycan/endotoxin receptor, TDC: \$120,000 (Total cost: \$132,000)
- 1990-1992 Principal Investigator  
American Heart Association Indiana Affiliate Grant: Synergistic effects of heparin and interleukin 1, TDC: \$50,000
- 1989-1990 Principal Investigator  
Biomedical Research Support Grant from Indiana University: Further characterization of peptidoglycan receptors, TDC: \$23,173
- 1989 Co-principal Investigator  
Small Instrumentation Program grant from NIH: Purchase of ultra-low temperature freezer and water purification system; awarded to Northwest Center for Medical Education, TDC: \$13,041
- 1988-1990 Principal Investigator  
American Heart Association Indiana Affiliate Grant: Enhancement of cytotoxic immune responses by heparin, TDC: \$36,000 (Total cost: \$39,600)

- 1985-1989 Principal Investigator  
National Institute of Arthritis and Musculoskeletal and Skin Diseases, NIH, R01 AR36640 Grant: Immunomodulating activity of fibronectin, TDC: \$184,654 (Total cost: \$276,981)
- 1985-1986 Principal Investigator  
NIH Biomedical Research Support Grant: Identification of receptors for bacterial peptidoglycan on mouse lymphocytes, TDC: \$15,581. W.J. Daly, Project Director
- 1985 Travel Award to the 2nd International Workshop on the Biological Properties of Peptidoglycan held in Munich, West Germany, from the Deutsche Forschungsgemeinschaft, DM 2,000
- 1983 Travel award to the Fifth International Congress of Immunology in Kyoto, Japan, from the American Association of Immunologists, \$1,500
- 1981-1984 Principal Investigator  
National Institute of Arthritis, Metabolism and Digestive Diseases, NIH, New Investigator R23 AM28226 Grant: Polyclonal B lymphocyte activation by peptidoglycan, TDC: \$104,763 (Total cost: \$157,145)
- 1980-1983 Principal Investigator  
NIH Grant: Effects of staphylococcal cell wall, peptidoglycan, and teichoic acid on the immune system, TDC: \$51,161. Part of the Biomedical Research Development Grant, Ch. W. Gibley, Jr., Project Director
- 1979-1980 Principal Investigator  
National Foundation for Infectious Diseases Grant: Compromised host as the result of immunosuppression caused by staphylococcal peptidoglycan, TDC: \$4,000
- 1978-1985 Principal Investigator  
Institutional (PCPM) Research Grants:  
  
Modulation of humoral immune response by staphylococcal products (1978-79), Mitogenic activity of staphylococcal cell wall polysaccharides (1979-80), Effects of staphylococcal peptidoglycan on mitogenic responsiveness (1980-81), Studies on the mechanism of polyclonal activation of immunoglobulin secretion in B lymphocytes induced by staphylococcal peptidoglycan (1981-82), TDC: \$3,000  
  
Characterization of the specificity of polyclonally induced anti-IgG autoantibodies (1982-83), Induction of autoantibodies in polyclonal activation of human peripheral blood lymphocytes (1983-84), TDC: \$2,000  
  
Effect of fibronectin on polyclonal activation (1984-85), TDC: \$3,000

1973-1977      Research Scientist  
PHS Grants from the Center for Disease Control: Host-parasite relationships in staphylococcal infections with special reference to the virulence of staphylococci, and Biological properties of staphylococcal and streptococcal products and their role in staphylococcal and streptococcal diseases, J. Jeljaszewicz, Principal Investigator

## **PATENTS**

2006      Dziarski, R, Wang, M, Liu, L-H, and Gupta, D. Improved Activity of Human Bactericidal Peptidoglycan Recognition Proteins and Their Synergism with Antibacterial Peptides (pending).

2001      Dziarski, R, Liu, C, Xu, Z, and Gupta, D. Peptidoglycan Recognition Protein Encoding Nucleic Acids and Methods of Use Thereof (pending).

## **HONORS**

2018      Recipient of Indiana University Trustees' Teaching Award (\$2,500)

2016      Recipient of Indiana University School of Medicine Class of 2016 Faculty Teaching Award

2014      Indiana University Outstanding Educator

2013      Indiana University Outstanding Educator

2012      Recipient of Indiana University Trustees' Teaching Award (\$2,500)

2012      Indiana University Outstanding Educator

2007      Recipient of Innovation Fellow Award from the Society of Innovators, sponsored by Ivy Tech State College

2001      Recipient of Indiana University Trustees' Teaching Award (\$2,500)

1998-99      Eminent Scholar, Indiana University School of Medicine (\$1,500 award plus travel funds to visit four campuses)

1971      Dean's Award to the best student at the Faculty of Biology, University of Warsaw

## **POSTDOCTORAL TRAINING**

1976-1977      Bacterial Immunology,  
Department of Bacteriology, National Institute of Hygiene, Warsaw, Poland

## **PREDOCTORAL TRAINING**

1973-1976      Bacteriology and Immunology,  
Department of Bacteriology, National Institute of Hygiene, Warsaw, Poland

1973-1974 Immunopathology,  
Department of Immunopathology, National Institute of Hygiene, Warsaw, Poland

### **Ph.D. THESIS**

1977 Immunobiological properties of *Staphylococcus aureus* cell wall polysaccharides  
(Janusz Jeljaszewicz, advisor)

### **M.Sc. THESIS**

1972 Phenotypic expression of spontaneous mutations to nalidixic acid resistance in  
*Escherichia coli* K-12 (Roman Mycielski, advisor)

### **SUPERVISORY AND ADMINISTRATIVE EXPERIENCE**

1985-2021 Administration of grants, coordinating research and equipment needs at the  
Indiana University School of Medicine-Northwest, supervising technicians,  
predoctoral and medical students, postdoctoral fellows, and junior faculty.

1990-2017 Organized and supervises an integrated multidisciplinary teaching segment,  
"Invasion and Defense", encompassing three courses: general pathology,  
immunology and medical microbiology, and elements of pharmacology in a case-  
based problem solving curriculum offered to medical students at Indiana  
University School of Medicine-Northwest. Responsible for designing the  
curriculum, selecting clinical cases, developing the schedule, and identifying  
and/or recruiting and coordinating the efforts of several basic science and clinical  
faculty.

1978-1984 Administration of grants, consulting and supervising collaborative research  
projects at PCPM and the University of Pennsylvania School of Medicine

1973-1977 Supervising research technicians

### **TEACHING EXPERIENCE**

2016-2020 Site Course Director of "Host Defense" – a teaching segment encompassing  
medical microbiology, medical immunology, and elements of pharmacology  
offered to medical students at Indiana University School of Medicine- Northwest.

Lectures (22 hrs/year) covering entire immunology and immunopathology,  
antimicrobial therapy, a part of medical bacteriology, and bacterial genetics  
Problem solving sessions (20 hrs/year)

1990-2017 Course Director of "Invasion and Defense" (#P650, 14 credit hrs): in charge of a  
teaching segment encompassing three courses: general pathology, immunology  
and medical microbiology, and elements of pharmacology (and medical genetics  
in 1996/97) in a case-based problem solving curriculum offered to second year  
medical students at Indiana University School of Medicine-Northwest.

Lectures (34 hrs/year) covering entire immunology and immunopathology, antimicrobial therapy, and a part of medical bacteriology and bacterial genetics  
Problem solving sessions (60 hrs/year); clinical laboratory (10 hrs/year)

Author of the following cases for the problem-solving curriculum offered to medical students at Indiana University School of Medicine-Northwest (each case is studied for a week in three tutorial sessions and in independent study and discussions):

- (1) "Juan Sanchez's Chronic Infections"
- (2) "Sarah Bowman's Abdominal Pain"
- (3) "Wayne Stoner's Burn"
- (4) "Tanners Family Ordeal"
- (5) "Debra Walsko's Bullous Lesion"
- (6) "Thomas Sekura's Joint Pain"
- (7) "Rebecca Yoder's Diarrheas"
- (8) "Emilia Pozanski's Head and Leg Pain"
- (9) "Tom Harrison's Cough"
- (10) "Michael Jones's Sudden Collapse "
- (11) "Martin Smith's Abdominal Swelling and Back Pain"

- 1985-1990 Lectures to medical students at Indiana University-Northwest in course #J522, Microbiology and Immunology (35 hrs/year) on immunology, medical bacteriology, genetics, antimicrobial therapy; and in course #C673, General Pathology (2 hrs/year) on carcinogenesis
- 1985-1990 Laboratory instruction to medical students at Indiana University-Northwest in general bacteriology, bacterial physiology, antisepsis, sterilization, chemotherapy, immunology, diagnostic medical bacteriology, virology, medical mycology, and parasitology
- 1985-2020 Member of three Graduate Ph.D. Research Committees at the Department of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis, Indiana
- 1977-1985 Lectures in immunology, immunopathology, medical bacteriology, genetics, and antimicrobial therapy to podiatric medicine students at PCPM
- 1977-1985 Laboratory instruction to podiatric medicine students in general bacteriology, bacterial physiology, antisepsis, sterilization, chemotherapy, immunology, diagnostic medical bacteriology, virology, medical mycology, and parasitology at PCPM
- 1974-1977 Lectures and laboratory courses in diagnostic medical bacteriology in continuing education program for public health laboratory supervisors and medical technologists at National Institute of Hygiene

## **Postdoctoral fellows and research faculty trained**

Dipika Gupta, Ph.D. 1992-1993  
Yiping Jin, M.D. 1993-1997  
Qiuling Wang, M.D. 1997-2000  
Chao Liu, M.D., Ph.D. 1997-2001  
Zheng-Ming Wang, M.D., Ph.D. 1998-1999  
Zhaojun Xu, M.D., Ph.D. 2000-2002  
Haitao Wang, Ph.D. 2002-2005  
Xinna Li, M.D., Ph.D. 2002-2009  
Minhui Wang, M.D., Ph.D. 2002-2007  
Xiaofeng Lu, Ph.D. 2004-2005  
Jin Qi, M.D., Ph.D. 2004-2007  
Shiyong Wang, M.D. 2004-2009  
Li-Hui Liu, Ph.D. 2005-2007  
Lawrence P. Fernando, Ph.D. 2007-2008  
Sukumar Saha, D.V.M., Ph.D. 2007-2010  
Xuefang Jing, M.D., Ph.D. 2008-2013  
Fareeha Zulfiqar, Ph.D. 2009-2013  
Shin Yong Park, Ph.D. 2009-2014  
Des Raj Kashyap, Ph.D. 2009-2020  
Ascención Torres-Escobar, D.V.M., Ph.D. 2016-2017  
María Dolores Juárez-Rodríguez, Ph.D. 2016-2017  
Serdar Abidin Gurses, Ph.D., 2017-2019  
Sunil Banskar, Ph.D., 2017-2020  
Chun-Kai Yang, Ph.D., 2017-2020

## **PROFESSIONAL SOCIETIES**

1990-2020     Member, International Endotoxin and Innate Immunity Society

1982-2020     Member, American Association of Immunologists  
Federation of American Societies for Experimental Biology

1978-2020     Member, American Society for Microbiology

1978-2020     Member, Society for Leukocyte Biology

## **PROFESSIONAL SERVICE**

### **Grant Review**

2019-2020     Member, NIH, NIAID, Study Section: Prokaryotic Cell and Molecular Biology  
(PCMB), Bethesda, MD

2014-2018     Member, NIH, NIAID, Study Section: Infectious Diseases and Microbiology  
Fellowship Panel: ZRG1 F13-C (20) L, Bethesda, MD

2012             Grant Reviewer, Israel Science Foundation, Jerusalem, Israel



- 2011 Grant Reviewer, Italian Cystic Fibrosis Research Foundation, Verona, Italy
- 2010 Grant Reviewer, United Kingdom Wellcome Trust, United Kingdom
- 2009-10 Member, NIH, NIAID, Study Section (Special Emphasis Panel): Biodefense Food- and Water-borne Diseases, ZAI1 GPJ-M (M1), Bethesda, MD
- 2009 Member, NIH, NIAID, Study Section: Recovery Act Study Section (ZRG1 IDM-C), Bethesda, MD
- 2009 Grant Reviewer, The Netherlands Organization for Health Research and Development, The Netherlands
- 2009 Grant Reviewer, Royal Society of New Zealand, Marsden Research Fund, New Zealand
- 2006 Grant Reviewer, Cooperative Grants Program (CGP) of the U.S. Civilian Research and Development Foundation (CRDF), Arlington, VA
- 2006 Grant Reviewer, United Kingdom Wellcome Trust, United Kingdom
- 2005-2006 Grant Reviewer, Research Foundation of Pasteur Institute, Paris, France, and University of Rome, Rome, Italy
- 2004 Member, NIH, NIAMS, Study Section: Innate Immunity Special Emphasis Panel IRG 2004,10 ZAR1 AAA-D, Bethesda, MD
- 2004 Member, NIH, NIAID, Bacterial and Fungal Pathogenesis Study Section (ZRG1IDM-N), Bethesda, MD
- 2004 Grant Reviewer, Italian Cystic Fibrosis Research Foundation, Verona, Italy
- 2002-2003 Member, NIH, NIAID, Study Section (Special Emphasis Panel): Innate Immunity in Vertebrates and Insects, Bethesda, MD
- 2002-2003 Member, NIH, NIAID Study Section (Special Emphasis Panel): Biodefense and Emerging Diseases Research Opportunities, Bethesda, MD
- 2003 Grant Reviewer, Austrian Science Fund, Vienna, Austria
- 1992-2002 Grant Reviewer, Merit Review Board for Infectious Diseases, Department of Veterans Affairs, Livermore, CA
- 2001 Grant Reviewer, United Kingdom Biotechnology and Biological Sciences Research Council, Swindon, UK
- 2000 Ad hoc Grant Reviewer, NIH Study Section (Comparative Medicine Review Committee), Bethesda, MD
- 1994, 1999 Grant Reviewer, Swiss National Science Foundation, Bern, Switzerland

- 1993 Grant Reviewer, International Science Foundation, Washington, D.C.
- 1993 External Grant Reviewer, Midwestern Consortium of Research Centers on Sexually Transmitted Diseases
- 1991-93 Member of the Board of Directors of the American Heart Association, Indiana Affiliate  
Member of the Executive Committee of the American Heart Association, Indiana Affiliate  
Member of the Research Allocations Committee of the American Heart Association, Indiana Affiliate
- 1991-92 Chairman of the Research Review Board of the American Heart Association, Indiana Affiliate
- 1990-91 Vice-chairman of the Research Review Board of the American Heart Association, Indiana Affiliate
- 1989-1992 Member of the Research Review Board of the American Heart Association, Indiana Affiliate
- 1992 Grant reviewer for the North Carolina Biotechnology Center

### **Journals**

- 1982-2020 Member of the Editorial Board of *Infection and Immunity*, the official journal of the American Society for Microbiology
- 2004-2020 Member of the Editorial Board of *Current Immunology Reviews*

Scientific reviewer for the following journals:

*Nature*  
*Nature Immunology*  
*Nature Medicine*  
*Nature Communications*  
*Nature Chemical Biology*  
*Nature Reviews Microbiology*  
*Proceedings of The National Academy of Sciences, USA*  
*Immunity*  
*Cell Host & Microbe*  
*PLoS Pathogens*  
*Blood*  
*Journal of Biological Chemistry*  
*Journal of Immunology*  
*Journal of Clinical Investigation*  
*European Journal of Clinical Investigation*  
*Molecular and Cellular Biology*  
*Scientific Reports*  
*PLoS One*

*Journal of Infectious Diseases*  
*Journal of Investigative Dermatology*  
*Journal of Molecular Biology*  
*Journal of Bacteriology*  
*Genomics*  
*Molecular Psychiatry*  
*Cellular Microbiology*  
*Cellular Immunology*  
*Arthritis and Rheumatism*  
*Frontiers in Microbiology*  
*Frontiers in Physiology*  
*Microbiology (UK)*  
*European Journal of Biochemistry*  
*Biochemical Journal*  
*Infection and Immunity*  
*International Immunology*  
*Innate Immunity*  
*Journal of Innate Immunity*  
*Applied and Environmental Microbiology*  
*Journal of Gene Medicine*  
*Biochimica et Biophysica Acta*  
*Allergy*  
*Cytokine*  
*Current Immunology Reviews*  
*Journal of Clinical Microbiology*  
*Developmental and Comparative Immunology*  
*Clinical and Diagnostic Laboratory Immunology*  
*Clinical and Vaccine Immunology*  
*FEMS Immunology and Medical Microbiology*  
*Immunology Letters*  
*European journal of Pharmacology*  
*Biomedical Science*  
*Journal of Endotoxin Research*  
*Cellular and Molecular Biology*  
*Critical Care Medicine*  
*Vaccine*

### **Indiana University Committee Service**

Faculty Promotion and Tenure Committee, IU School of Medicine and School of Allied Health, Indianapolis (member, 1992-2020)  
IU School of Medicine Strategic Planning Working Group "Advance Science and Clinical Knowledge" (member, 2017-2020)  
IU Collaborative Research Grant Program Review Committee (member, 2011)  
IU School of Medicine and Purdue University, Collaboration in Biomedical Research Grant Review Committee (member, 2006-2007)  
IU School of Medicine, Search Committee for the Director of the IU School of Medicine-Muncie and Assistant Dean, Indianapolis (member, 2005)  
IU School of Medicine Standards of 3D Task Force, Research design Team, Indianapolis (member, 2004)

IU School of Medicine Standards of Excellence Task Force, Indianapolis (member, 2003-2004)  
IU School of Medicine, Search Committee for the Director of the Northwest Center for Medical Education and Assistant Dean, Indianapolis (member, 2003-2004)  
Faculty Review and Enhancement Committee (Post-tenure Review), IU School of Medicine and School of Allied Health, Indianapolis (member, 2001-2003)  
Radiation Safety and General Safety Committee (member, 1985-1992; chairman, 1992-2020)  
Lake County Medical Center Development Agency Scholarship Committee (member, 1993-2003)  
Council of Masters (Committee overseeing the Regional Center Alternative Pathway, member, 1989-2017)  
Primary Committee (member, 1987-88, 1991-2020)  
Animal Care Committee (member, 1986-88; 1994-96; chairman, 1988-1990, member, 1994-2020)  
Library Committee (member, 1985-86, 1996-2005)  
Schedule Committee (member, 1985-86)  
Equipment Committee (member, 1985-87)  
Biochemistry Search Committees (member, 1985-86, 1989-90)  
Seminars Committee (chairman, 1986-87)  
Pathology Search Committee (member, 1986-87)  
Medical Cell Sciences Graduate Program Application Committee (member, 1986-1988)  
Graduate Ph.D. Research Committees at Indianapolis (member, 1985-present)  
Graduate Committee (member, 1989-93; chairman, 1990-1991, member, 1995-97)  
Curriculum Committee in Indianapolis (substitute member, 1989-90)  
Organizing Committee for Invasion and Defense (course encompassing General Pathology, Microbiology, Immunology, and elements of Pharmacology, given to Medical Students in the Regional Center Alternative Pathway, chairman, 1989-1991)  
Committee on Student Evaluation in the Regional Center Alternative Pathway (chairman, 1989-91)  
Research and equipment coordinator for the Northwest Center for Medical Education (1990-94)  
Committee on the Triple-Jump Exam in the Regional Center Alternative Pathway (member, 1990-91)

### **Pennsylvania College of Podiatric Medicine Committee Service (1978-1985)**

Member of the Institutional Review Board (Research Committee), Animal Care Committee (Chairman, 1984-85), Library Committee, Long Range Planning Coordination Committee, Microbiology Search Committee (ad hoc), Radiation Safety Committee (ad hoc), and Dean Search Committee (ad hoc) at the Pennsylvania College of Podiatric Medicine

### **OTHER PROFESSIONAL ACTIVITIES**

2013 Co-Organizer of and Session Chairman at the 3<sup>rd</sup> International Great Wall Symposium: The Dynamics of Peptidoglycan Structure and Function, Pasteur Institute, Paris, France

- 2008 Session Chairman at the 10th Congress of the International Endotoxin and Innate Immunity Society, Edinburgh, United Kingdom
- 2006 Session Chairman at the joint 9th Congress of the International Endotoxin and Innate Immunity Society and Annual Meeting of the Society for Leukocyte Biology, San Antonio, TX
- 2006 Judge in the Young Investigator Award Competition at the joint 9th Congress of the International Endotoxin and Innate Immunity Society and Annual Meeting of the Society for Leukocyte Biology, San Antonio, TX
- 2006 Member of the Nominating Committee, International Endotoxin and Innate Immunity Society
- 2002-2004 Chairman of Immunology Section, Scientific Program Committee, 8th Congress of the International Endotoxin Society in 2004, Kyoto, Japan
- 2001 Session Chairman at the 2nd International Symposium “Septic Shock Caused by Gram Positive Bacteria”, Vibo Valentia Seminars on Shock, Vibo Valentia, Italy
- 2000 Session Chairman at the 6th Congress of the International Endotoxin Society, Paris, France
- 1998 Session Chairman and Organizer at the International Symposium “Septic Shock Caused by Gram Positive Bacteria”, Vibo Valentia Seminars on Shock, Vibo Valentia, Italy
- 1990 Session Chairman and Organizer at the 90th Annual Meeting of the American Society for Microbiology, Anaheim, CA
- 1985 Session Chairman at the 2nd International Workshop on the Biological Properties of Peptidoglycan in Munich, West Germany
- 1976 Member of the Organizing Committee of the 3rd International Symposium on Staphylococci and Staphylococcal Infections, Warsaw, Poland
- 1976 Assistant Editor of the Proceedings of the 3rd International Symposium on Staphylococci and Staphylococcal Infections: Staphylococci and Staphylococcal Diseases, Gustav Fischer Verlag, Stuttgart and New York
- 1995- Listed in MARQUIS "Who's Who in America", "Who's Who in the World", "Who's Who in Science and Engineering", and in "Polish American Who's Who".
- 1985- 2020 Member of the FASEB Federal Contact Network

### **Invited Speaker at Seminars and Meetings**

Temple University School of Medicine (1977)  
NIAID, NIH (1977)  
Vanderbilt University School of Medicine (1977)  
University of North Carolina School of Medicine (1977)

International Conference: Immunomodulation by Bacteria and Their Products, Tampa, FL (1979)  
University of Pittsburgh School of Medicine (1981)  
Hahnemann Medical College (1981)  
Temple University School of Medicine (1982)  
Medical College of Georgia (1984)  
NIADDKD, NIH (1985)  
International Workshop: Biological Properties of Peptidoglycan, Munich, Germany (1985)  
Indiana University School of Medicine, Indianapolis (1985)  
Our Lady of Mercy Hospital, Dyer, IN (1986)  
Illinois State University, Normal, IL (1986)  
University of Illinois College of Medicine at Chicago (1987)  
Indiana University School of Medicine, Indianapolis (1987)  
Evansville Center for Medical Education, Indiana University, Evansville, IN (1988)  
NICHD, NIH, (1989)  
Medical Microbiology Statewide (Indiana) Meeting, Indianapolis (1989)  
90th Annual Meeting of the American Society for Microbiology (1990)  
Medical Microbiology Statewide (Indiana) Meeting, Indianapolis (1991)  
Indiana University School of Medicine, Indianapolis (1992)  
Keystone Symposium on Recognition of Endotoxin in Biologic Systems, Lake Tahoe, CA (1992)  
2nd Congress of International Endotoxin Society, Vienna, Austria (1992)  
Scientific Session, Indiana University School of Medicine, Indianapolis (1994)  
Medical Microbiology Statewide (Indiana) Meeting, Indianapolis (1995)  
Second Annual Midwest Bacterial Pathogenesis Meeting, Chicago, IL (1995)  
Indiana University School of Medicine, Indianapolis (1996)  
Center for Medicine and Biosciences, Borstel, Germany (1996)  
Medical Microbiology Statewide (Indiana) Meeting, Indianapolis (1997)  
University of Louisville School of Medicine, Louisville, KY (1998)  
Medical Microbiology Statewide (Indiana) Meeting, Indianapolis (1998)  
5th Congress of the International Endotoxin Society, Santa Fe, NM (1998)  
International Symposium "Septic Shock Caused by Gram Positive Bacteria", Vibo Valentia Seminars on Shock, Vibo Valentia, Italy (1998)  
University of Illinois, Urbana-Champaign, IL (1999)  
Medical Microbiology Statewide (Indiana) Meeting, Indianapolis (1999)  
University of Southern Indiana and Indiana University, Evansville, IN (1999)  
University of Louisville School of Medicine, Louisville, KY (2000)  
University of California, Riverside, CA (2000)  
6th Congress of the International Endotoxin Society, Paris, France (2000)  
2nd International Symposium "Septic Shock Caused by Gram Positive Bacteria", Vibo Valentia Seminars on Shock, Vibo Valentia, Italy (2001)  
Keystone Symposium "Innate Immunity: Evolution and Link to Adaptive Immunity", Taos, NM (2002)  
7th Congress of the International Endotoxin Society, Washington, DC (2002)  
33rd Annual Meeting of the German Society for Immunology, Marburg, Germany (2002)  
International Symposium of SBF 576 "Innate Immunity and Microbial Pathogenesis", Schloss Elmau, Germany (2002)  
Rush University Medical Center, Chicago, IL (2002)  
Biogen Corporation, Boston, MA (2002)

University of Central Florida, Orlando, FL (2002)  
Louis Pasteur University & CNRS, Strasbourg, France (2002)  
American Association of Immunologists 90th Annual Meeting, Denver, CO (2003)  
Autumn Immunology Conference & The Inflammation Research Association Meeting,  
Chicago, IL (2003)  
33rd Annual Meeting of the Japanese Society for Immunology, Fukuoka, Japan (2003)  
World Congress of Shock and Inflammation, Munich, Germany (2004)  
American Society for Microbiology 104th Annual Meeting, New Orleans (2004)  
8th Congress of the International Endotoxin and Innate Immunity Society, Kyoto, Japan  
(2004)  
Keystone Symposium “Innate Immunity”, Banff, Alberta, Canada (2006)  
9th Congress of the International Endotoxin and Innate Immunity Society and Annual  
Meeting of the Society for Leukocyte Biology, San Antonio, TX (2006)  
Peptidoglycan Symposium, Madison, WI (2007)  
Northwestern University School of Medicine, Chicago, IL (2008)  
10th Congress of the International Endotoxin and Innate Immunity Society, Edinburgh,  
United Kingdom (2008)  
2009 Society for General Microbiology Meeting, Symposium: The Legacy of Fleming:  
New Weapons Against Infection, Harrogate International Center, United  
Kingdom (2009)  
National Institutes for Allergy and Infectious Diseases, NIH, Bethesda, MD (2009)  
Purdue University, West Lafayette, IN (2009)  
Excellence in Immunology Lecture Series, University of Texas Southwestern Medical  
Center, Dallas, TX (2010)  
Indiana University School of Medicine, Department of Medicine, Division of  
Gastroenterology, Indianapolis (2011)  
8<sup>th</sup> International Conference on Innate Immunity, Chania, Crete, Greece (2011)  
2<sup>nd</sup> International Great Wall Symposium: The Dynamics of Peptidoglycan Structure and  
Function: New Insights into the 'Great Wall', Cascais, Portugal (2011)  
Indiana University School of Medicine, Department of Microbiology and Immunology,  
Indianapolis, IN (2012)  
3<sup>rd</sup> International Great Wall Symposium: The Dynamics of Peptidoglycan Structure and  
Function, Pasteur Institute, Paris, France (2013)  
Cornell University, Ithaca, NY (2013)  
Valparaiso University, Valparaiso, IN (2014)  
Symposium on “Microbiome, Bacterial Peptidoglycan and the Central Nervous System”,  
Karolinska Institutet, Stockholm, Sweden (2017)  
Yale University, Microbial Sciences Institute, New Haven, CT (2018)  
Statewide Microbiology and Immunology Meeting, Indianapolis, IN (2018)  
Gordon Research Conference: The Bacterial Cell Envelope: From Mechanism of  
Assembly to Role in the Physiology of Single Cells and Communities, Mount  
Snow, VT (2018)

#### **DEPOSITIONS OF RESEARCH RESOURCES (GENBANK, SWISS-PROT, GEO, etc)**

- 2001 GenBank AY035376, *Homo sapiens* peptidoglycan recognition protein-I- $\alpha$  precursor (PGLYRPIalpha) mRNA, complete cds.
- 2001 GenBank AY035377, *Homo sapiens* peptidoglycan recognition protein-I- $\beta$  precursor (PGLYRPIbeta) mRNA, complete cds.

- 2001 GenBank AF384856, *Homo sapiens* peptidoglycan recognition protein-L precursor (PGLYRPL) mRNA, complete cds.
- 2002 GenBank AY144360, *Mus musculus* peptidoglycan recognition protein (PGLYRP) gene, exon 1.
- 2002 GenBank AY144361, *Mus musculus* peptidoglycan recognition protein (PGLYRP) gene, exons 2 and 3.
- 2004 Swiss-Prot/TrEMBL Q96PD5, *Homo sapiens* peptidoglycan recognition protein 2 (PGLYRP2) amino acid sequence.
- 2006 GenBank DQ447202, *Danio rerio* peptidoglycan recognition protein 2 (PGLYRP-2) mRNA, complete cds.
- 2006 GenBank DQ447203, *Danio rerio* peptidoglycan recognition protein 5 (PGLYRP-5) mRNA, complete cds.
- 2006 GenBank DQ447204, *Danio rerio* peptidoglycan recognition protein 6 (PGLYRP-6) mRNA, complete cds.
- 2010 NCBI GEO GSE18859; [Dziarski R](#), Saha S, Gupta D, McClintick JN; Gene expression in the colon of DSS-treated wild type and Pglyrp1<sup>-/-</sup>, Pglyrp2<sup>-/-</sup>, Pglyrp3<sup>-/-</sup>, and Pglyrp4<sup>-/-</sup> mice (deposition of 50 whole genome expression arrays and data analysis).
- 2012 NCBI GEO GSE43137; Park SY, Gupta D, [Dziarski R](#); Real-time quantitative PCR analysis of mRNA from lungs of WT and Pglyrp1<sup>-/-</sup> mice sensitized with HDM (deposition of 18 expression arrays and data analysis).
- 2012 NCBI dbSNP SS#647514526, *Homo sapiens* peptidoglycan recognition protein 2 (PGLYRP2) exon 2, G/A, Ala208Thr SNP.
- 2012 NCBI dbSNP SS#647514528, *Homo sapiens* peptidoglycan recognition protein 2 (PGLYRP2) exon 2, G/A, Gln237Gln SNP.
- 2012 NCBI dbSNP SS#647514529, *Homo sapiens* peptidoglycan recognition protein 3 (PGLYRP3) exon 6, G/A, Ala272Thr SNP.
- 2012 NCBI dbSNP SS#647514530, *Homo sapiens* peptidoglycan recognition protein 4 (PGLYRP4) exon 9, A/G, Thr350Ala SNP.
- 2013 NCBI GEO GSE44211; Kashyap DR, Gupta D, [Dziarski R](#); Gene expression in *Escherichia coli* treated with human PGRP, gentamicin, and CCCP (deposition of 12 whole genome expression arrays and data analysis).
- 2013 NCBI GEO GSE44212; Kashyap DR, Gupta D, [Dziarski R](#); Gene expression in *Bacillus subtilis* treated with human PGRP, gentamicin, and CCCP (deposition of 12 whole genome expression arrays and data analysis).



- 2013 NCBI SRA SRP021488 (SRX271511–SRX271570); Dziarski R, Dowd SE, Park SY, Gupta D; Bacterial diversity in the stools of wild type and *Pglyrp1*<sup>-/-</sup>, *Pglyrp2*<sup>-/-</sup>, *Pglyrp3*<sup>-/-</sup>, and *Pglyrp4*<sup>-/-</sup> mice identified by sequencing of bacterial 16S ribosomal RNA (rRNA) genes (sequences of 16S rRNA genes from entire microbiomes from 12 mice per strain, total 60 mice).
- 2013 NCBI GEO GSE47588; Zulfiqar F, Jing X, Park SY, Gupta D, Dziarski R; Real-time quantitative PCR analysis of mRNA from the colon of WT, *Nod2*<sup>-/-</sup>, *Pglyrp3*<sup>-/-</sup>, and *Pglyrp3*<sup>-/-</sup>*Nod2*<sup>-/-</sup> mice treated with oral DSS (48 expression arrays and data analysis).
- 2016 NCBI SRA SRP076031 (<https://www.ncbi.nlm.nih.gov/sra>); Gupta D, Kirby K, Dowd SE, Dziarski R; Bacterial diversity in the stools of wild type and *Nod2*-deficient mice maintained on high fat diet or low fat diet identified by sequencing of bacterial 16S ribosomal RNA (rRNA) genes (24 microbiome samples, SAMN05190337-SAMN05190360).
- 2018 *Pglyrp3*<sup>-/-</sup> knockout mice (JAX# 031371 C.129S6-*Pglyrp3*<sup>tm1Rdz/J</sup> - <https://www.jax.org/strain/031371>) deposited in The Jackson Laboratory Mutant Mouse Repository, The Jackson Laboratory, Bar Harbor, Maine.
- 2018 *Pglyrp4*<sup>-/-</sup> knockout mice (JAX# 031372 C.129S6-*Pglyrp4*<sup>tm1Rdz/J</sup> - <https://www.jax.org/strain/031372>) deposited in The Jackson Laboratory Mutant Mouse Repository, The Jackson Laboratory, Bar Harbor, Maine.
- 2019 NCBI SRA PRJNA549505 (<https://www.ncbi.nlm.nih.gov/sra>); Kashyap DR, Gupta D, Dziarski R; TN-seq screening of *Escherichia coli* Tn10 insertion library treated with bactericidal and bacteriostatic concentrations of human peptidoglycan recognition protein PGLYRP4 (9 samples, SAMN12090400 - SAMN12090408).
- 2019 NCBI SRA PRJNA565191 (<http://www.ncbi.nlm.nih.gov/bioproject/565191>); Dziarski R, Banskar S, Gupta D; Bacterial diversity in the feces, oropharynx and lungs of germ-free mice with experimentally induced asthma colonized with microbiota from *Pglyrp1*<sup>-/-</sup> or wild type mice (99 samples, SAMN12736477 - SAMN12736575).
- 2020 NCBI SRA PRJNA628733 (<https://www.ncbi.nlm.nih.gov/sra>); Yang C-K, Kashyap DR, Gupta D, Dziarski R; TN-seq screening of *Bacillus subtilis* library treated with human peptidoglycan recognition protein PGLYRP4 (9 samples, SAMN14749977 - SAMN14749985).

## PUBLICATIONS

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### Reviews, book chapters, books

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