

**DENNIS F. MANGAN, PH.D.**

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**PROFESSIONAL OBJECTIVE**

To increase public awareness of and support for biomedical research by helping scientists communicate their results effectively to all types of audiences, including colleagues, the media, elected officials, advocacy groups, administrators, funding agencies, donors, students, family and friends.

**SUMMARY OF GENERAL QUALIFICATIONS**

Ph.D. in the Life Sciences (Medical Microbiology)

Research in the areas of Microbiology, Immunology, and Cell Biology

Oral presentation skills

Writing skills

Research program development and evaluation

Science gap analyses

Program strategic planning

Faculty and staff development

Interpersonal relations

Manager and supervisor of biomedical research programs

Adult education instructor

Certified science communication mentor

**SUMMARY OF PROFESSIONAL EXPERIENCE**

12 years as a Professional Speaker and Communications Educator

44 years of Ph.D. experience in the Life Sciences

40 years of experience in writing research grant application and reviews

40 years of teaching science communication skills to undergraduate and graduate students, postdoctoral fellows, faculty and staff

16 years of experience in US National Institutes of Health (NIH) extramural program development, administration and community outreach

10 years experience as a university researcher, advisor and educator

6 years supervisory experience as an NIH Extramural Branch Chief

3 years as an Associate Dean for Research, University of Southern California (USC) School of Dentistry

2 years experience as an Acting Deputy Division Director, NIH

2 years as a Senior Research Advisor to the NIH Office of the Director

## PROFESSIONAL EXPERIENCE

### **Science Communication** (2011– present)

As Founder and Director of the [Chalk Talk Science Project](#), I advocate for all early career scientists to receive formal training in science communication skills. I look for ways to increase: awareness of and access to science communication learning opportunities, number of sci comm trainers, and funding and support for sci comm training.

I teach scientists how to talk about their work to all types of audiences. I present workshops and lectures to help scientists overcome their fears of speaking in public, and present their work as interesting, informative and entertaining stories.

I talk with the public (e.g., high schools, social and service clubs), write newspaper op-ed pieces supporting science, and prepare book reviews. I advise high school, science graduate students, postdoctoral fellows, faculty, and staff on how to improve their presentations and grant proposals.

I have presented lectures and workshops at:

- Forsyth Institute, Boston
- Tufts Medical Center
- Boston University
- Rutgers University
- Stanford University
- University of Florida - Center for Molecular Microbiology
- University of Santa Cruz – student chapter
- University of Michigan
- University of California San Francisco
- Sonoma State University Biology Colloquium
- University of Hawaii, Mānoa – Student Immunization Initiative
- Las Positas College - Biology Club
- Buck Institute for Research on Aging
- International Association for Dental Research - annual conference
- American Society for Microbiology (ASM) - Northern California Chapter
- ASM Kadner Summer Career Development Institute
- Simmaron Research
- C-MORE Professional Development Training Program (UC Santa Cruz, University of Hawaii, MIT, Woods Hole Oceanographic Institution, Columbia University, Monterey Bay Aquarium Research Institute)

- AAAS Pacific Division
- Piner High School
- Sonoma County Office of Education Summer Course
- Society of Asian Scientists and Engineers (SASE) Annual Meeting

Volunteer facilitator for the American Society for Biochemistry and Molecular Biology (ASBMB) online course, [The Art of Science Communication](#) (since 2013-present.)

Guest editor for the 2018 special issue of the Journal of Microbiology and Biology Education (JMBE) on [Science Communication, Volume 19, Issue 1](#).

**National Academy of Sciences – 2023** Selection committee for the Eric and Wendy Schmidt Excellence in Science Communication awards. Reviewed over 300 submissions of written, audio, and video submissions.

**Non-Profit Organization Board Member – Research Advisor (2012-2018)**

Served on advisory Boards for non-profit organizations having the mission to increase funding and support for research on Chronic Fatigue Syndrome (ME/CFS.) Responsibilities include providing advice about funding sources, approaches for securing funding for research and training projects, organizing conferences, and fundraising. I work with these organizations and their research communities to strengthen outreach activities that will increase awareness of and support for ME/CFS by legislators, news media, other researchers, university/industry/government leaders, students, family and friends. Served on the Boards of:

- IACFS/ME
- Stanford University Chronic Fatigue Research Initiative
- Simmaron Research
- Solve ME/CFS Initiative

**Senior Research Advisor, NIH (2009-2011)**

Served as Senior Research Advisor to the Director, Office of Research on Women’s Health (ORWH) regarding advances in sex/gender research and initiatives to advance women’s health over the next decade. Performed scientific policy, program planning, organizational management and outreach activities for the ORWH, employing previous experience in NIH extramural research programs. Activities included:

- Serving as the leader and public/media/advocacy point contact for NIH research and funding for Chronic Fatigue Syndrome (ME/CFS).
- Providing advice and guidance for maintaining, upgrading and developing new initiatives for research on Women’s Health
- Monitoring research publications for new data relevant to differences in the genetics, physiology, biochemistry, microbiology and behavior of males and females

- Assisting in the development, writing and layout of the ORWH Strategic Plan for 2020
- Assembling reports on awards, policies, and activities associated with the ORWH
- Analyzing the ORWH research portfolio to identify areas of opportunity for growth and gaps in scientific knowledge
- Serving as a public spokesperson for the ORWH, NIH, and the DHHS.
- Serve as the ORWH representative to emerging NIH initiatives, committees

**Associate Dean for Research, School of Dentistry, University of Southern California (2006-2009)**

Served on School's senior administrative staff as key representative and spokesperson for biomedical basic and clinical research. Collected and analyzed faculty research data. Provided guidance to faculty, students and staff on all issues related to the preparation, writing and submission of research grant and contract applications. Represented the School at various research activities and conferences nationally and internationally. Organized the annual student/faculty research festival for the School, and the Student Research Group.

**Infectious Diseases Program Director, Health Scientist Administrator, NIH (1992-2006)**

Served as a key staff member and spokesperson for various extramural programs in microbiology and immunology at the National Institute for Dental and Craniofacial Research (NIDCR). Helped to identify the best scientific areas to support, locate the most qualified scientists to carry out the research, guide the submission of grant/cooperative agreement/contract applications to obtain funding, and provide oversight of Federal research dollars. Designed and organized major trans-NIH initiatives for research on mucosal immunity, biofilms, and microbial genomes. Led the initiation of the Human Microbiome Project genomic examination of all bacteria/viruses on or in the body. Team taught courses for new NIH program staff on best practices for being a Health Scientist Administrator (Program Director.) Authored grant and contract solicitations (RFAs and PAs). In 1994, initiated the first use of Internet listservs to deliver NIH grant information to researchers involved in infectious diseases.

**Biomedical Research and Teacher – Microbiology, Immunology and Cell Biology. University of Michigan, University of Rochester, (1979-1992)**

Designed and conducted original research on infectious diseases of the oral cavity. Presented data from these studies to scientists, students, reporters (TV and print), health care practitioners, industry representatives and public groups. Taught courses on microbial pathogenicity and immunology.

**EMPLOYMENT TIMELINE**

- 2012-now Founder and Director, [Chalk Talk Science Project](#)
- 2009-2011 Senior Research Advisor, Office of Research on Women's Health, NIH
- 2006-2009 Associate Dean for Research, University of Southern California School of Dentistry
- 2005-2006 Acting Director, Center for Infectious Diseases and Immunology, NIDCR/NIH
- 2003-2005 Acting Deputy Director, Division of Basic and Translational Sciences, NIDCR/NIH
- 2000-2005 Chief, Infectious Diseases and Immunity Branch, NIDCR/NIH
- 1992-2006 Director, Infectious Diseases Programs, NIDCR/NIH
- 1989-1992 Visiting Scientist, Laboratory of Immunology, NIDR/NIH
- 1984-1989 Assistant Professor, Department of Dental Research, University of Rochester, Rochester, NY
- 1979-1984 Postdoctoral/Research Scientist, Oral Biology, University of Michigan, Ann Arbor, MI
- 1974-1979 Graduate Teaching Assistant, Microbiology and Immunology, West Virginia University, Morgantown, WV
- 1973-1974 Clinical Microbiologist, Raleigh General Hospital, Beckley, WV

## **EDUCATION & TRAINING**

- 2023 Science Communication Mentor certification. [SCOARE](#) at MD Anderson
- 2018-2019 Improv & Acting classes, 6<sup>th</sup> Street Playhouse, Santa Rosa, CA
- 2019 Professional Speaking. Santa Rosa Junior College, Santa Rosa, CA
- 2014 Professional Speaking Academy. National Speakers Association, San Francisco
- 2014 Storytelling for Business. Santa Rosa Junior College, Santa Rosa, CA
- 2014 Introduction to Public Speaking. Coursera Online.
- 2014 Introduction to Communication Science. Coursera Online
- 2014 (Message) Content Strategy. Coursera Online
- 2013-now Advanced Level Toastmasters. Santa Rosa, CA
- 2012-2014 General Communication Classes (Pitching Your Story, Non-Verbal Skills, Visualizing Complex Data, Technical Presentations, Improv Acting/Fear Reduction) Stanford University Continuing Education
- 2012 Communicating Science Fall Institute. Alan Alda Center for Communicating Science, Stony Brook University.
- 2006-2009 Executive Leadership Series, University of Southern California
- 2002 Advanced Leadership Training, NIH-University of Maryland
- 1992-2006 NIH Courses -- Administrative, Management and Supervision
- 1989-1992 Visiting Scientist, Laboratory of Immunology, NIDR, NIH
- 1979-1984 Postdoctoral Fellow/Research Scientist, Oral Biology, University of Michigan, Ann Arbor
- 1975-1979 Ph.D., Medical Microbiology, West Virginia University, Morgantown
- 1974-1975 M.S., Medical Microbiology, West Virginia University, Morgantown

1972-1973 B.S., Bacteriology, Iowa State University, Ames  
1967-1971 B.S., Physiological Psychology, Pennsylvania State University,  
State College, PA

### **SCIENTIFIC ADVISORY BOARD MEMBER**

2012-now Stanford University Chronic Fatigue Research Initiative  
2012-2014 International Association for Chronic Fatigue Syndrome/Myalgic  
Encephalomyelitis (IACFS/ME)  
2013-2014 Simmaron Research, Incline Village, NV  
2014-2014 Solve ME/CFS Initiative

### **PROFESSIONAL SOCIETY MEMBERSHIPS**

Research!America  
American Society for Microbiology  
American Association for the Advancement of Science  
American Society for Biochemistry and Molecular Biology  
International Association for CFS/ME (chronic fatigue syndrome)  
International/American Association for Dental and Craniofacial Research  
Society for Science and the Public  
PCST – Global Network for Science Communication  
Association of Science Communicators  
SciComms: A Science Communication Collective  
Science Communication Trainers Network  
Storytellers Association of California  
Union of Concerned Scientists  
Wine Country Speakers

### **JOURNAL REVIEWER**

Archives of Oral Biology  
Infection and Immunity  
Journal of Clinical Periodontology  
Journal of Dental Education  
Journal of Dental Research  
Journal of Immunology  
Journal of Microbiology and Biology Education (guest editor)  
Journal of Periodontal Research  
Journal of Periodontology  
Oral Microbiology and Immunology

### **GRANT REVIEWER**

NIH (Dental) Special Review Section; Special Emphasis Panels: 1987-89

## **CHALK TALK SCIENCE PROJECT** (2012 – present)

Founder and Director. The mission of CTS is to make boring, ineffective science presentations obsolete by teaching students, researchers, technicians and educators the principles of good speaking. The goal of CTS is to get science communication training integrated into the career development plans of all science students and professionals. [www.chalktalkscience.org](http://www.chalktalkscience.org)

## **NATIONAL INSTITUTES OF HEALTH** (1989-2006, 2009-2011)

### **Profession Activities**

- 2010-2011 NIH Representative, Chair of Working Group – Chronic Fatigue Syndrome, Office for Research on Women’s Health
- 2009-2010 Program Advisor, Office for Research on Women’s Health
- 2003-2006 Lead Coordinator, The Human Microbiome Project, NIH and other Federal agencies (Now an NIH Roadmap Initiative)
- 2005-2006 Lead NIH Coordinator, National Academies of Science Report on Metagenomics
- 2003-2006 Member, Bioinformatics and Computational Roadmap Working Group
- 2003-2006 Member, Molecular Libraries and Imaging Implementation Roadmap Group
- 2003-2006 NIH Extramural Science Administrator Training, Advisor/Presenter
- 2003-2006 NIDCR Board of Survey (oversight of government property)
- 2001-2006 Lead NIH Coordinator, Biofilm Program Initiatives
- 1996,1999 Planning Committee, Scientific Frontiers in Clinical Dentistry
- 1996 Facilitator, Biomimetics and Biomaterials Advisory Group Meeting
- 1996-2006 Coordinator, NIDCR-CSR Referral Guidelines - Liaison
- 1995-1996 NIDR Representative, NIH Emerging Infectious Diseases Committee
- 1995-1999 Coordinator, Division of Extramural Research, Tracking of Women and Minority in Clinical Research
- 1995-2006 Alternate Representative, Program Official Project Officer Forum
- 1995 James A. Shannon Director’s Award Selection Committee, NIH
- 1994-2006 NIDCR Liaison, American Association for Periodontology, Chicago
- 1994-2006 Advisory Board, National Oral Health Information Clearinghouse
- 1993 Division of Extramural Research, Combined Federal Campaign Keyworker
- 1993-2006 Coordinator, Extramural Program Advisory Committee
- 1993-1995 Founder and Coordinator, Apoptosis Trans-NIH Interest Group
- 1992-2006 Author: NIH Request for Applications, Program Announcements, Notices
- 1992-2006 Information Technology Advisory Committee, NIDCR
- 1992-2000 NIDR Representative, NIH Diabetes Interagency Coordinating Committee
- 1991 Coordinator, Laboratory of Immunology Seminar Series
- 1991 Coordinator, Intramural NIDR Computer Acquisition Team
- 1989-91 Coordinator, Intramural NIDR Stock Supplies Ordering and Receiving

## **Staff and Student Development**

Served as a senior career advisor to program administrators  
Assisted with experimental research design and data presentations  
Helped colleagues discuss Federal policies with the media, scientists, advocacy groups and industry representatives.

## **Teaching**

Team taught courses for new NIH program staff on best practices for being a Health Scientist Administrator (Program Director)

## **UNIVERSITY OF SOUTHERN CALIFORNIA (2006-2009)**

### **Professional Activities**

2009 Coordinator/advisor, Recovery Act Funding, School of Dentistry  
2006-2009 Faculty organizer, School of Dentistry -- Research Day  
2008, 2010 Co-organizer, Beneficial Microbes Conferences, sponsored by the American Society for Microbiology,  
2007 Dental T32 Training Grant, DDS/MS Program  
2007 Dental U54 Interdisciplinary Research Grant, Organizer, Center for Research on Disparities in Oral Health  
2007 Contributing author, Clinical and Translational Science Awards Grant  
2007 Organizer, Small Business Phase II, Idea International Inc., Subcontract  
2007 Director, Summer Research Fellow Program  
2007 Stevens Institute for Innovation, Technology Transfer Staff Selection Committee  
2005, 2006 Instructor, Summer Research Program, sponsored by the American Society for Microbiology

## **Faculty, Staff and Student Development**

Identify funding sources for faculty and student research projects  
Assist grant writing and submission  
Assist in preparation and review of manuscripts  
Enhance career development by writing nominations for faculty professional awards. Winners included: Margarita Zeichner-David (American Dental Association Student Mentor Award); Roseanne Mulligan (American Association for Dental Research Geis Award); Songtao Shi (California Institute for Regenerative Medicine); Harold Slavkin (American Dental Association Gold Medal); Janet Moradian-Oldak (American Association for Dental Research Strides in Science)  
Serve as advisor for the student research group  
Mentor postdoctoral fellows and new faculty in career development

## **Teaching**

Research presentation skills for students and faculty

Problem based learning classes – dental school

Research career advisor for students, residents, fellows and faculty

## **UNIVERSITY OF ROCHESTER (1984-1989)**

### **Professional Activities**

1984-1989 Member, Medical School Faculty Council

1986-1989 Member, Medical School Curriculum Council

1986-1989 Member, Microbiology Graduate Education Committee

1988-1989 Judge, chair, and organizer, Buonocore Student Research Awards, local American Association for Dental Research

1985-1989 Interviewer, Graduate/Medical School Applicants

1984-1989 Faculty advisor, Immunology Journal Club

1988-1989 Councillor, Rochester Section, American Association for Dental Research

### **Faculty, Staff and Student Development**

Assist in preparation and review of manuscripts

Help prepare presentations of data

Assist in grant writing and submission

Introduce researchers to new microbiology, immunology, cell biology techniques

Provide career development options for students and fellows

## **Teaching**

Mucosal Immunology

Pathogenic Mechanisms in Microbial Diseases

Medical Microbiology Laboratory

Immunology Research Colloquium

Independent Reading Course-Immunology Review

Dental Research Colloquium (Coordinator)

## **RESEARCH TRAINEES**

1989-91 (NIH) 3 Part-Time High School Students

1985-89 (University of Rochester) 2 Ph.D. Students; 1 Visiting Scientist; 7 Summer/Part Time Students

1982-83 (University of Michigan) 2 Summer/Part Time Students

## **RESEARCH SUPPORT**

2008-2009 NIDCR R44 DE018062: Small Business Innovative Research Grant. Subcontract to USC School of Dentistry from IDEA International, Inc. (Las Vegas) –Total Direct Costs: \$100,000. Principal investigator.

- 2008 NIH and NSF scientific meeting (R13) grants for the American Society for Microbiology Beneficial Microbes Workshop. Total Direct Costs: \$13,000. Co-principal investigator.
- 1989-92 NIDCR National Research Service Award Senior Postdoctoral Fellowship (F33). "Cytokine-mediated regulation of monocyte apoptosis". Total Direct Costs: \$90,000. Principal investigator.
- 1988-89 Biomedical Research Support Grant. "Caries in rats immunologically tolerized as neonates". Total Direct Costs: \$7,354. Principal investigator.
- 1986-89 NIH Individual Research Grant (RO1). "Polyclonal B cell activation by *F. nucleatum* cell walls". Total Direct Costs: \$268,000. Principal investigator.
- 1986-87 Biomedical Research Support Grant: "Isolation of lymphocyte migration-inducing factors from *B. gingivalis*". Total Direct Costs: \$5,000. Principal investigator.
- 1986-87 NIDR RO3 DE07914: Small project grant, "Enhanced polyclonal B cell activation by PMN lysates". Total Direct Costs: \$14,755. Principal investigator.
- 1985-86 Biomedical Research Support Grant: "Effect of PMNs on human polyclonal B cell activation". Total Direct Costs: \$6,000. Principal investigator.
- 1985-86 AMIDEAST Peace Fellowship for Dr. Nagwa Ghoraba. "Lymphocyte chemotaxis *in vitro*". Total Direct costs: \$15,000. Research advisor.
- 1982-86 NIDR R23 DE06023: New Investigator Research Award, "Polyclonal B cell activation in periodontal disease". Total Direct Costs: \$107,500. Principal investigator.
- 1983-84 Biomedical Research Support Grant: "Effect of fibronectin on PBA". Total Direct Costs: \$5,000. Principal investigator.
- 1981-84 NIH Individual Research Grant (RO1): "Spirochete influence on immunity in oral disease". Total Direct Costs: \$150,000. Co-principal investigator. (Principal Investigator: Dennis Lopatin)
- 1978-79 Biomedical Research Support Grant: "Biological function of pili". Total Direct Costs: \$2,000. Principal investigator.

- 1976-77 Biomedical Research Support Grant: "Inhibition of chemotaxis by exfoliatin". Total Direct Costs: \$1,000. Principal investigator.
- 1974-75 Biomedical Research Support Grant: "Isolation and mode of action of exfoliatin". Total Direct Costs: \$2,500. Principal investigator.

## ORAL PRESENTATIONS

100+ Presentations: Professional Societies, NIH Administrators, Dental Societies, Universities, and Federal Government Agencies

## AWARDS AND HONORS

National Academy of Sciences. Eric and Wendy Schmidt Excellence in Communication. Selection of most meritorious submissions. 2023  
American Association for the Advancement of Science Fellow: 2021  
Department of Health and Human Services – Assistant Secretary for Health, Special Recognition Award, XMRV Scientific Research Working Group: 2012.  
NIH cash award for activities associated with Chronic Fatigue Syndrome: 2011  
NIH cash award for cooperative service, National Cancer Institute, 2010  
NIH conversion to Federal Government Title 42 Pay Scale: 2003-2006  
NIH On-The-Spot Cash Awards: 1997, 1998, 2004, 2006  
NIH Award of Merit: 1995, 1997  
NIH Quality Step Increase Awards: 1992, 1994, 1995, 1996  
NIH Special Service Award, Combined Federal Campaign Keyworker: 1993  
West Virginia University Benedum Foundation Predoctoral Fellowship: 1974-79  
West Virginia University Sigma Xi Student Research Convocation, 3rd place: 1977  
American Society for Microbiology, Allegheny Branch, 1st place: 1977  
Iowa State University - graduated highest 2% in Science and Humanities: 1973

## PUBLICATIONS

### MASTER OF SCIENCE THESIS

"Acrylamide and polymorphonuclear leukocyte function". 1977. West Virginia University Graduate School

### DOCTOR OF PHILOSOPHY DISSERTATION

"Mannose sensitive interaction of *Escherichia coli* with human peripheral leukocytes *in vitro*". 1979. West Virginia University Graduate School

### PEER-REVIEWED ARTICLES

1. **Mangan**, D.F., and I.S. Snyder. 1978. The effect of acrylamide on human polymorphonuclear neutrophils *in vitro*. *British Journal of Industrial Medicine* 35: 305-311.

2. **Mangan**, D.F., and I.S. Snyder. 1979. Mannose-sensitive interaction of *Escherichia coli* with human peripheral leukocytes *in vitro*. *Infection and Immunity* 26: 520-527.
3. **Mangan**, D.F., and I.S. Snyder. 1979. Mannose-sensitive stimulation of human leukocyte chemiluminescence by *Escherichia coli*. *Infection and Immunity* 26: 1014-1019.
4. Lopatin, D.E., D.F. **Mangan**, I.S. Horner, and F.L. Peebles. 1980. Mitogen-induced amplification of blastogenesis in lipopolysaccharide-precultured lymphocytes. *Infection and Immunity* 29: 512-519.
5. **Mangan**, D.F., and D.E. Lopatin. 1981. *In vitro* stimulation of immunoglobulin production from human peripheral blood lymphocytes by a soluble preparation of *Actinomyces viscosus*. *Infection and Immunity* 31: 236-244.
6. Lopatin, D.E., D.F. **Mangan**, and I.S. Horner. 1981. Cells involved in the mitogen- induced helper function which facilitate the blastogenic response to *Actinomyces viscosus*. *Clinical Immunology and Immunopathology* 19: 394-405.
7. **Mangan**, D.F., B.E. Laughon, B. Bower, and D.E. Lopatin. 1982. *In vitro* lymphocyte blastogenic response and humoral antibody titers from periodontitis patients to oral spirochete isolates. *Infection and Immunity* 37: 445-451.
8. **Mangan**, D.F., and D.E. Lopatin. 1983. Polyclonal activation of human peripheral blood lymphocytes by *Fusobacterium nucleatum*. *Infection and Immunity* 40: 1104-1111.
9. **Mangan**, D.F., T. Won, and D. E. Lopatin. 1983. The non-specific production of IgM antibodies to periodontal disease associated microorganisms following polyclonal human B lymphocyte activation by *Fusobacterium nucleatum*. *Infection and Immunity* 41: 1038-1045.
10. **Mangan**, D.F., T. Won, and D.E. Lopatin. 1984. Monocyte suppression of *Fusobacterium nucleatum*-induced human polyclonal B lymphocyte activation. *Infection and Immunity* 46: 332-339.
11. Lopatin, D.E., L.M. Martel, and D.F. **Mangan**. 1985. Microbe-induced lymphocyte blastogenesis enhancement after preculture. *Infection and Immunity* 48: 159-164.
12. **Mangan**, D.F., M.J. Novak, S.A. Vora, J. Mourad, and P.S. Kriger. 1989. Lectin-like interactions of *Fusobacterium nucleatum* with human neutrophils. *Infection and Immunity* 57: 3601-3611.

13. Tuttle, R.S., and D.F. **Mangan**. 1990. Interaction of *Fusobacterium nucleatum* with human peripheral blood lymphocytes. *Journal of Periodontal Research* 25: 364-371.
14. **Mangan**, D.F., G.R. Welch, and S.M. Wahl. 1991. Lipopolysaccharide, tumor necrosis factor-alpha, and IL-1 beta prevent programmed cell death (apoptosis) in human peripheral blood monocytes. *Journal of Immunology* 146: 1541-1546.
15. Tuttle, R.S., N.A. Strubel, J. Mourad, and D.F. **Mangan**. 1992. A non-lectin-like mechanism by which *Fusobacterium nucleatum* 10953 adheres to and activates human lymphocytes. *Oral Microbiology and Immunology* 7:78-83.
16. **Mangan**, D.F., N.S. Taichman, E.T. Lally, and S.M. Wahl. 1991. Lethal effects of *Actinobacillus actinomycetemcomitans* leukotoxin on human T lymphocytes. *Infection and Immunity* 59: 3267-3272.
17. **Mangan**, D.F., and S.M. Wahl. 1991. Differential regulation of human monocyte programmed cell death (apoptosis) by chemotactic factors and pro-inflammatory cytokines. *Journal of Immunology* 147: 3408-3414.
18. **Mangan**, D.F., B. Robertson, and S.M. Wahl. 1992. IL-4 enhances programmed cell death (apoptosis) in stimulated human monocytes. *Journal of Immunology* 148: 1812-1816.
19. **Mangan**, D.F., S.M. Wahl, B.M. Sultzer, and S.E. Mergenhagen. 1992. Stimulation of human monocytes by endotoxin-associated protein: inhibition of programmed cell death (apoptosis) and potential significance in adjuvanticity. *Infection and Immunity* 60: 1684-1686.
20. **Mangan**, D.F., S.E. Mergenhagen, and S.M. Wahl. 1993. Apoptosis in human monocytes: possible role in chronic inflammatory diseases. *Journal of Periodontology* 64: 461-466
21. Wahl, S.M., G.L. Costa, D.E. Mizel, J.B. Allen, U. Skaleric, and D.F. **Mangan**. 1993. Role of transforming growth factor beta in the pathophysiology of chronic inflammation. *Journal of Periodontology* 64: 450-455.

#### MEETING REPORT

1. **Mangan** D.F., C. Laughlin, T. Gondre-Lewis, B.A. Eldadah, C.L. McDonald, D.G. Blair, C. Mullins, J. Clayton, and J.W. Kusiak. 2012. Interdisciplinary analysis of a complex illness. NIH convenes a State of the Knowledge Workshop to advance scientific progress for Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS). Trans-NIH Working Group on Chronic Fatigue Syndrome.

## REVIEWS AND CHAPTERS

1. **Mangan**, D.F. 1988. What can *in vitro* lymphocyte data tell us about the pathogenesis of periodontal diseases? In: Periodontology Today. (ed. B. Guggenheim), pp. 187-195. S. Karger, Basel, Switzerland.
2. Tew, J., D. Engel, and D.F. **Mangan**. 1989. Polyclonal B cell activation in periodontitis. Journal of Periodontal Research 24: 225-241.
3. Depaola L.G., D. **Mangan**, S.E. Mills, W. Costerton, J. Barbeau, B. Shearer, J. Bartlett. 2002. A review of the science regarding dental unit waterlines. Journal American Dental Association 133: 1199-1206.
4. **Mangan**, D.F. 2002. Nutrition and Oral Infectious Diseases: Connections and Future Research. Compendium 23: 416-422.
5. Darveau, R.P., M. McFall-Ngai, E. Ruby, S Miller, D.F. **Mangan**. 2003. Host tissues may actively respond to beneficial microbes. American Society for Microbiology News 69: 186-191.
6. **Mangan**, D.F. 2009. Dental student research at USC School of Dentistry. Journal of the California Dental Association. December 2009.
7. Holgate S.T., A.L. Komaroff, D. **Mangan**, and S. Wessely. 2011. Chronic fatigue syndrome: understanding a complex illness. Nature Review Neuroscience 12: 539-544.

## LETTER TO THE EDITOR

1. **Mangan**, D.F., R.H. Selwitz, and R. Genco. 2000. Oral infections associated with diabetes mellitus. New England Journal of Medicine 342: 896. (Letter to the Editor)

## NEWSPAPER OP-ED ARTICLES

1. **Mangan**, D. Making teeth strong. The Press Democrat (Santa Rosa, CA). Wednesday, February 28, 2012. (Fluoridating the public water supply.) <http://www.pressdemocrat.com/article/20120228/OPINION/120229497?p=4&tc=pg>
2. **Mangan**, D. Why research funding needs the North Bay's help. The Press Democrat (Santa Rosa, CA). Saturday, August 11, 2012. (Advocating for more NIH-funded biomedical research.) <http://www.pressdemocrat.com/article/20120811/OPINION/120819993/1070/opinion?p=1&tc=pg>
3. **Mangan**, D. Science struggles to find funding. The Press Democrat (Santa Rosa, CA). Sunday, June 30, 2013. (Explaining how federal funding

cutbacks are negatively impacting local scientists.)

<http://www.pressdemocrat.com/article/20130629/OPINION/130629469>

#### ORGANIZATION NEWSLETTER ARTICLES

1. **Mangan, DF.** 2012. Winning a Research Grant: Exciting the Reviewers. IACFS/ME Newsletter 5: Appendix 6. (Chronic Fatigue Syndrome)  
<http://www.iacfsme.org/LinkClick.aspx?fileticket=Bxa9HMEWRRk%3d&tabid=512>
2. **Mangan, DF.** 2012. Writing an NIH Grant Application – Team Science: Playing in the Same Sandbox. CFIDS Research1 Newsletter. (Chronic Fatigue Syndrome)

#### BOOK & JOURNAL REVIEWS

1. **Mangan, D.** 2012. *Guide to Effective Grant Writing. How to Write a Successful NIH Grant Application*, by Otto O. Yang. MICROBE. The News Magazine of the American Society for Microbiology 7: 431-432.
2. **Mangan, D.** 2012. *Don't Be Such a Scientist*, by Randy Olson. MICROBE. The News Magazine of the American Society for Microbiology 7: 484-485.
3. **Mangan DF,** Cloyd ET, Romo JA, Wessner DR, Westenberg DJ, Adukwu E, Menninger H, Gardy J. 2018 Introducing the JMBE Themed Issue on Science Communication. J Microbiol Biol Educ. Mar 30;19(1). pii: 19.1.9.
4. **Mangan DF.** The Head and Heart of Science Communication Sage Advice from Alan Alda. J Microbiol Biol Educ. 2018 Mar 30;19(1). pii: 19.1.42.

#### PERSONAL REFERENCES --- AVAILABLE UPON REQUEST