

**R. WILLIAM DEPAOLO, PHD**  
WILLIAM@DEPAOLOLAB.COM**PERSONAL DATA**

Birthplace           Portland, Maine, USA  
Citizenship         USA

**EDUCATION**

Undergraduate       **Bates College**, Lewiston, ME  
BS, Neuroscience | 1995-1999

Graduate            **Feinberg School of Medicine at Northwestern University**, Chicago, IL  
PhD, Immunology & Microbial Pathogenesis | 1999-2004

**POSTGRADUATE TRAINING**

Research Associate   **University of Chicago**, Chicago, IL  
2004-2007

**FACULTY POSITIONS HELD**

2008-2011           **Assistant Professor** (Research Associate)  
Department of Medicine, Division of Gastroenterology  
University of Chicago, Chicago, IL

2011-2016           **Assistant Professor**  
Department of Molecular Microbiology and Immunology,  
University of Southern California, Keck School of Medicine,  
Los Angeles, CA

2016-present        **Associate Professor**  
Department of Medicine, Division of Gastroenterology  
University of Washington Medical Center, Seattle, WA

**HOSPITAL POSITIONS HELD**

- 2015-2017      **Associate Director** | Graduate Program  
University of Southern California, Keck School of Medicine,  
Los Angeles, CA
- 2015-2016      **Director** | Committee on Microbiome & Host Interaction in Disease  
Children's Hospital LA/University of Southern California,  
Keck School of Medicine, Los Angeles, CA
- 2016-present    **Director** | Center for Intestinal Microbial Ecology  
University of Washington Medical Center

**HONORS**

- 2002              Gordon Conference Travel Grant, Chemokines
- 2007              University of Chicago Pilot & Feasibility Award  
Digestive Disease Resource Center
- 2008              Best Scientific Talk, Biological Science Division Retreat  
University of Chicago
- 2009              Best Scientific Talk, Biological Science Division Retreat  
University of Chicago
- 2013              USC Liver Center Pilot & Feasibility Award
- 2015              Mentor of the Year, Keck School of Medicine
- 2016              Named Lynn M & Michael D Garvey Endowed Chair,  
Division of Gastroenterology, Department of Medicine,  
University of Washington

**BOARD CERTIFICATION**

None

**CURRENT LICENSE(S) TO PRACTICE**

None

**PROFESSIONAL ORGANIZATIONS**

- Member              American Society of Microbiology
- Member              American Association of Immunologists
- Member              Society for Mucosal Immunology

**TEACHING RESPONSIBILITIES**

2011-2016	<b>Research Supervisor   Directed Research</b> Undergraduate Program University of Southern California, Los Angeles, CA
2012-2015	<b>Instructor   Infection and Host Responses</b> Graduate Program, Keck School of Medicine, Los Angeles, CA
2012-2016	<b>Course Director &amp; Instructor   Topics in Cellular &amp; Molecular Immunology</b> Graduate Program, Keck School of Medicine, Los Angeles, CA
2013-2015	<b>Instructor   Research Approaches to Biomedical Problems</b> Undergraduate Program University of Southern California, Los Angeles, CA
2016	<b>Instructor   Introduction to Infectious Disease</b> Second year medical students Keck School of Medicine, Los Angeles, CA

**MENTOR ACTIVITIES****Postdoctoral Research Associates**

2011-2013	Karishma Kamdar, PhD
2012-2014	Jee-Hyun Kim, PhD
2015-2016	Robert Rankin, PhD

**Pediatric Gastroenterology Clinical Fellows**

2011-2013	Vivien Nguyen, MD
2014-2016	Arathi Lakhole, MD
2015-present	Fotini Tania Mitsinikos, MD

**Doctoral Advisor**

2015-present	Denise Chac
2015-present	Melissa Kordahi

**Master's Advisor**

2013-2015	Vrishika Kulur
2010-2012	Yui Sugiura

**Medical Student Required Scholarly Project Mentor**

2012-2013	Cynthia Guterrez
2013-2015	Gabriela Moriel
2013-2015	Mariana Martinez
2014-2016	Susanna Sandoval

**K-award Trainee Mentoring Committee**

2011-2015	Yuhua Zheng, MD
2012-present	Ling Shao, MD/PhD

**Pediatric GI Fellow Scholarship Oversight Committee Member**

2012-2014	Rabea Alholsh, MD (mentor: Brent Polk)
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2014-2016 Vik Anand, MD (mentor: Grace Aldrovandi)  
Sharon Tam, M.D. (mentor: Brent Polk)

### **EDITORIAL RESPONSIBILITIES**

2012-2014 Immunity & Diseases

### **SPECIAL NATIONAL RESPONSIBILITIES**

2012-2016 Executive Committee, ImmunologyLA Conference  
2015 Study Section, Crohn's & Colitis Foundation of America

### **SPECIAL LOCAL RESPONSIBILITIES**

#### **Keck School of Medicine**

2011-2015 Member, IACUC, USC, Keck School of Medicine  
2011-2014 Member, Institutional Biosafety Committee, USC, Keck School of  
Medicine  
2012-2015 Interviewer & Department Representative, Graduate  
Admissions Program  
2015 Judge, Medical Student Research Day  
2015 Co-director PhD Admissions Committee

#### **Children's Hospital LA**

2013-12/2016 Member, Chief of Pediatric Gastroenterology Interviews  
2013-2014 Member, Donner Fellowship Selection Committee

### **RESEARCH FUNDING**

#### **Current**

PI, Endogenous TLR1 signals prevent uncontrolled innate immunity in the colon, NIDDK/NIH R01 (DK104908), 04/01/2015 – 03/31/2020

PI, Manipulation of the Microbiome to Prevent Colorectal Cancer, Rose Hills Foundation, 07/01/2014-06/30/2016

PI, Determine the role of TLR1 signaling in chronic inflammation and colorectal cancer, NCI/NIH R21 (CA182595), 08/13/2014 – 07/31/2016

#### **Past**

PI, Committee on Host-Microbe Interactions in Disease (CMHID), USC Office of Research & Provost Collaboration Fund, 06/01/2015-07/31/2016

PI, The impact of TLR1 on dysbiosis and intestinal inflammation, NIDDK/NIH R03 (DK097442), 01/2013-12/31/2014

PI, Determine the impact of TLR1 and TLR6 signaling in development of colorectal cancer, NIDDK/NIH P30 (DK048522 Satellite Project), 03/01/13-02/28/14

PI, Role of TLR6 and JNK during *Y. enterocolitica* infection, NIDDK/NIH K01 (DK1082725), 02/01/09-01/31/14

PI, Immune-regulation by *Y. enterocolitica* virulence factor LcrV, NIDDK/NIH P30 (DK42086 Satellite Project), 01/01/08-12/31/08

### TRAINING GRANTS

1. Mechanism underlying immune-modulatory effects of LcrV, NIAID/NIH, F32 (AI068370), 07/1/06-07/31/07
2. Immune-modulation by *Yersinia pestis*, LcrV, NIAID/NIH, T32 (AI709027), 08/01/04-06/30/06

### **Pending**

1. PI, Modulation of pathogenic bacteria and commensal microbiota by polyunsaturated fatty acids, NIDDK/NIH, R21
2. PI, TLR6 signaling in chronic inflammation and colorectal cancer, NCI/NIH, R01

### BIBLIOGRAPHY

#### **Peer Reviewed**

1. **DePaolo RW**, Rollins BJ, Kuziel W, and Karpus WJ. 2003. CCL2 and its receptor regulate mucosal APC production of IL-12 and TGF- $\beta$  in high dose oral tolerance. *Journal of Immunology* 171(7). 3560-7.
2. **DePaolo RW**, Lathan R and Karpus WJ. 2004. CCR5 is involved in high dose oral tolerance by regulating mucosal CCL2. *Journal of Immunology*. 173(1):314-20.
3. Overheim KA, **DePaolo RW**, DeBord KL, Morrin EM, Green NM, Anderson D, Brubaker RR, Jabri B and Schneewind O. 2005. Plague vaccines lacking the immune modulatory properties of rLcrV. *Infection and Immunity*. 2005 73(8):5152-9.
4. ★Marketon, MM§, **DePaolo RW**§, DeBord KL, Jabri B. and Schneewind O. 2005. Plague bacteria target immune cells during infection. *Science*. 309(5741):1739-41.  
§, authors contributed equally  
*Highlighted in Faculty of 1000 web-based review*
5. **DePaolo RW**, Lathan R and Karpus WJ. 2005. CCL2 is required for control of murine gastric *Salmonella* infection. *Infection and Immunity*. 73(10):6514-22.
6. Anderson DM, Marketon MM, Overheim KA, **DePaolo RW**, Ciletti N, Jabri B, DeBord KL and Schneewind O. 2006. rV10 Immunization of Mice - Immunogenicity and Protective Immunity against Bubonic and Pneumonic Plague. *Infection and Immunity*. 74(8):4910-4.
7. **DePaolo RW**, Tang F, Kim I, Han M, Levin N, Ciletti N, Anderson DM, Schneewind O and Bana Jabri. 2008. TLR6 drives differentiation of tolerogenic DC and contributes to LcrV-mediated plague pathogenesis. *Cell Host Microbe*. 2008 Oct 16;4(4):350-61.
8. Elhofy A§, **DePaolo RW**§, Lira SA, Lukacs NW and Karpus WJ. Mice deficient for CCR6 fail to control chronic experimental autoimmune encephalomyelitis. *J. Neuroimmunol*. 2009 Aug 18; 213: 91-9.  
§, authors contributed equally

9. ★**DePaolo RW**, Abadie V, Tang F, Hall J.A., Wang W., Marietta EV, Murray J.A, Belkaid Y. and Jabri B. Co-adjuvant effects of retinoic acid and IL-15 promote inflammatory immune responses to dietary antigens. *Nature* 2011 Mar 10; 471: 2 20–224.  
*Highlighted in Faculty of 1000 web-based review*
10. ★**DePaolo RW**§, Khakpour S, Wang W, Antonopoulous D, and Jabri B§. A specific role for TLR1 in protective TH17 immunity during mucosal infection. *J. Ex. Med.* 2012 July 30;209;1437-44  
§, co-corresponding authors  
*This article was featured in Nature Medicine Research Highlights Swami M. Nature Medicine 18, 1349 (2012)*  
*Highlighted in Faculty of 1000 web-based review*
11. Kamdar K, Ngyuen V and **DePaolo RW**. Role of TLRs in intestinal homeostasis. 2013. *Virulence*, 2013 Jan 18;4(3). Review
12. ★Sugiura Y, Khakpour S, Young G, Karpus WJ and **DePaolo RW**. Generation of anti-*Yersinia* mucosal immunity is dependent upon TLR1-induced CCL20. *Mucosal Immunology*. 2013. Nov; 6(6):1101-9.
13. Michail S, Bultron G, **DePaolo RW**. Genetic variants associated with Crohn's disease. *Appl Clin Genet*. 2013 Jul 16; 6:25-32. Review
14. Nguyen V, Pearson K, Kim J, Kamdar K, and **DePaolo RW**. Retinoic acid can exacerbate T cell intrinsic TLR2 activation to promote tolerance. 2015 *Plos One*. Mar 31;10(3)
15. ★Kamdar K, Khakpour S, Chen J, Leone V, Bruc J, Mangatu T, Antonopoulos DA, Chang EB2, Kahn SA, Kirschner BS, Young G, and **DePaolo RW**. Genetic mutations in innate immunity alters the metabolic milieu of inflamed tissue promoting chronic inflammation and anti-commensal immunity. 2016. *Cell Host & Microbe*. Jan 13 19(1): 21-31  
*This article was featured and previewed in Cell Host & Microbe*  
*Abt M, Cell Host & Microbe, 2016. Jan 13: 19(1)3-5*
16. Chac D and **DePaolo RW**. The dynamic microbial landscape of the intestine and the impact on probiotic therapy. 2015. *Journal of Probiotics and health*, J Prob Health 4:137.
17. Okazaki S, Loupakis F, Stintzing S, Shu C, Zhang W, Yang D, Ning Y, Sunakawa Y, Stremitzer S, Matsusaka S, Berger MD, Parekh A, West JD, Miyamoto Y, Suenaga M, Schirripa M, Cremolini C, Falcone A, Heinemann V, **DePaolo RW** and Lenz HJ. 2016. Clinical significance of TLR1 I602S polymorphism for patients with metastatic colorectal cancer treated with FOLFIRI plus bevacizumab. *Molecular Cancer Therapeutics*: molcanther-0931

## BOOK CHAPTERS

None

## PUBLISHED BOOKS, VIDEOS, SOFTWARE

None

**OTHER PUBLICATIONS**

1. **Plague and Hantavirus Outbreaks**, NBC's The Today Show, 2012
2. **Gut Instincts**, Bates College Magazine, 2013
3. **Is it safe to sit on a public toilet?** Buzzfeed Internet News, 2014
4. **How dirty is your cell phone?** Buzzfeed Internet News, 2015
5. **What to do when you can't quite go**, Huffington Post, 2015. Link [here](#)
6. **Caffeine and Diarrhea**, Huffington Post Contributor, 2015 Link [here](#)
7. **The best way to clean your grimy, bacteria-laden cellphone**, 2016. Link [here](#)
8. **Special Edition Germs and Everyday Items**, Sacramento News Radio, 2016

**MANUSCRIPTS SUBMITTED**

1. Kim J, Rankin CR, Chac D, and **DePaolo RW**. Restoring microbial ecology suppresses colorectal carcinogenesis. *Submitted* J. Exp. Medicine.

Abstracts in the final section.

**NATIONAL INVITATIONAL LECTURES**

- 2005 Wellcome Trust and Cell Publishing: Host-pathogen interaction. Cambridge, England
- 2006 XII International Celiac Disease Symposium. New York, New York.
- 2008 Keystone Conference: Innate Immunity: Signaling Mechanisms. Keystone, Colorado
- 2009 Keystone Conference: Innate, Adaptive and Regulatory Immune Responses to Intestinal Microbiota (A6). Taos, New Mexico
- 2011 Keystone Conference: Mucosal Immunology. Vancouver, British Columbia, Canada
- 2011 La Jolla Immunology Conference. La Jolla, California
- 2012 Department of Microbiology, University of California-Irvine, Irvine, California
- 2012 ImmunologyLA, Los Angeles, California
- 2013 Department of Gastroenterology, University of Washington, Seattle, Washington
- 2013 Western Association of Physicians. Carmel, California
- 2014 La Jolla Institute of Allergy and Immunology, La Jolla, California
- 2014 Department of Allergy and Infectious Disease, University of Washington, Seattle,
- 2015 Microbiome Symposium, The Saban Research Institute, Los Angeles, California
- 2015 Latino Medical Student Association, Workshop Organizer & Speaker, Los Angeles, California
- 2015 University of California Los Angeles, Los Angeles, California
- 2015 Southern California Environmental Health Science Center, Los Angeles, California
- 2016 LA County Division of Infectious Disease, Los Angeles, California
- 2016 Current Topics and Methods in Microbiome Research, Center for AIDS Research and the Global Center for Integrated Health of Women, Adolescents, & Children.