Curriculum Vitae

**Date of Revision**: 2016-07-01

Name: David R. Peaper, MD, PhD, D(ABMM)

School Assignment: Yale University, School of Medicine

Born: January 15, 1977

Education & Training:

5/1999 B.A., Biology, DePauw University, (Magna cum laude)

Honors Thesis Title: "Lymphocyte adhesion mediated by

CD101 and *a*vb3: a possible role in intestinal inflammation"

5/2007 Ph.D., Immunobiology, Yale University School of Medicine

Adviser: Dr. Peter Cresswell

Dissertation Title: "Biochemical and functional characterization of the tapasin/ERp57 conjugate"

5/2008 M.D., Yale School of Medicine

Academic Appointments:

7/2008 – 6/2009 Resident, Clinical Pathology, Yale New Haven Hospital

7/2009 – 6/2010 Chief Resident, Clinical Pathology, Yale New Haven Hospital

7/2010 – 6/2011 Fellow, Medical Microbiology, Yale New Haven Hospital

7/2011 – 9/2011 Associate Research Scientist, Laboratory Medicine

9/2011 – 6/2013 Instructor, Laboratory Medicine

7/2013 – Present Assistant Professor, Laboratory Medicine

**Administrative Positions:**

7/2011 – 6/2013 Interim Director, Medical Microbiology Laboratory, Yale New Haven Hospital

9/2011 – Present Director, Virology Reference Laboratory, VA Connecticut Healthcare System

7/2013 – Present Director, Medical Microbiology Laboratory, Yale New Haven Hospital

**Board Certification:**

8/2012 – Present Diplomate (Clinical Pathology), American Board of Pathology (Maintained 2014 to 2016)

8/2016 – Present Diplomate, American Board of Medical Microbiology

**Honors & Awards**:

5/2011 Edwin Lennette Award, pan-American Society for Clinical Biology

6/2010 Donald Buchholz, MD Resident Research Prize, Yale University School of Medicine, Department of Laboratory Medicine

1999 Phi Beta Kappa (DePauw Chapter)

1998 Crohn's and Colitis Foundation of America Undergraduate Fellowship

1998 American Digestive Health Foundation Undergraduate Scholar

**Grant / Clinical Trials History:**

**Past Grants:**

Agency: NIH/NIAID

ID#: R43AI102541-01A1

Title: “The use of mass spectrometry for rapid detection of carbapenemase-producing bacteria”

PI: Mandar Kulkarni, Co-PI

Percent Effort: 5%

Total Costs for Project Period: $224,667

Project Period: 1/2013 – 6/2013

**Invited Speaking Engagements**

1. “Considerations for the Routine Application of MALDI-TOF MS in Clinical Microbiology: the Yale Experience.” ASM Eastern New York Branch Regional Meeting. October 15, 2014.
2. “Medical Student Laboratories for Teaching Diagnostic Microbiology.” American Society for Microbiology General Meeting. May 19, 2014.
3. “Trends in Antibiotic Resistance.” Internal Medicine Grand Rounds. Greenwich Hospital. January 25, 2013.
4. “Update in Virology Diagnostics.” Internal Medicine Grand Rounds. West Roxbury VA Hospital. October 3, 2012.
5. “Introducing Mass Spectrometry into a Clinical Laboratory.” Next Generation Dx Summit. Washington D.C. Short Course. August 20, 2012.

**Professional Service**

**Journal Service:**

2008 – Present Reviewer, Transfusion Medicine

2009 – Present Reviewer, Journal of Clinical Apheresis

2013 – Present Reviewer, Journal of Clinical Virology

2014 – Present Reviewer, Microbial Drug Resistance

**Professional Memberships:**

8/2010 – Present Fellow, College of American Pathologists

9/2010 – Present Member, American Society for Microbiology

2/2014 – Present Fellow, American Society for Clinical Pathology

**University Service:**

2014 – Present Member, Billing and Compliance Leaders Committee

2014 – Present Associate Program Director, Medical Microbiology Fellowship

2011 – Present Assistant Course Director, Medical Microbiology Course (YSM)

**Hospital Service:**

2016 – Present Member, YNHHS Antimicrobial Stewardship Committee

2014 – Present Sponsor, C. difficile Charter Team

2011 – Present Member, YNHH Antimicrobial Drug Utilization Subcommittee

2011 – Present Residency Interviewer, AP/CP and CP-Only

**Peer Reviewed Original Research**

**\*** Denotes Co-First Author

1. Dick T.P., Bangia N., **Peaper D.R.,** Cresswell P. (2002) Disulfide bond isomerization and the assembly of MHC class I-peptide complexes. Immunity 16:87-98.
2. **Peaper D.R.,** Wearsch P.A., Cresswell P. (2005) Tapasin and ERp57 form a stable disulfide-linked dimmer within the MHC class I peptide loading complex. EMBO J 24: 3613-3623.
3. **Peaper D.R.** and Cresswell P. (2008) The redox activity of ERp57 is not essential for its functions in MHC class I peptide loading. PNAS 105: 10477-10482.
4. Dong G, Wearsch P.A., **Peaper D.R.,** Cresswell P, Reinisch K.M. (2009) Insights into MHC class I peptide loading from the structure of the tapasin/ERp57 thiol oxidoreductase heterodimer. Immunity 30: 21-32.
5. Vigneron N\*, **Peaper D.R.\*,** Leonhardt R.M., Cresswell P. (2009) Functional significance of tapasin membrane association and disulfide linkage to ERp57 in MHC class I presentation. European Journal of Immunology 39: 2371-6.
6. Wearsch P.A., **Peaper D.R.,** and Cresswell P. (2011) Essential glycan-dependent interactions optimize MHC class I peptide loading. PNAS 108: 4950-5.
7. Ichinohe T, Pang I, Kumamoto Y, **Peaper D.R.**, Ho J, Murray T.S., Iwasaki A. (2011) Microbiota regulates immune defense against respiratory tract influenza A virus infection. PNAS 108:5354-9.
8. Elinav E, Strowig T, Kau AL, Henao-Mejia J, Thaiss C.A., Booth C.J., **Peaper D.R.,** Bertin J, Eisenbarth S.C., Gordon J.I., Flavell R.A. (2011). NLRP6 Inflammasome Regulates Colonic Microbial Ecology and Risk for Colitis. Cell. 145:745-57.
9. Somily A.M., **Peaper D.R.**, Paintsil E., Murray T.S. (2012). Comparison of Disk Diffusion and Etest Methods to Determine the Susceptibility of Staphylococcus aureus Circulating in Riyadh, Saudi Arabia to Fusidic Acid. International Journal of Microbiology. 2012:391251.
10. **Peaper D.R.\***, Kulkarni M.V.\*, Tichy A.N., Jarvis M., Murray T.S., Hodsdon M.E. (2013). Rapid detection of carbapenemase activity through monitoring ertapenem hydrolysis in *Enterobacteriaceae* with Liquid Chromatography (LC) - tandem mass spectrometry (MS/MS). Bioanalysis. 5:147-57.
11. Kulkarni M.V., Tichy A.N., Pyka J.S., Murray T.S., Hodsdon M.E., **Peaper D.R**. (2014). Use of Imipenem to Detect KPC, NDM, OXA, IMP, and VIM Carbapenemase Activity from Gram Negative Rods in 75 Minutes Using LC-MS/MS. J Clin Microbiol. 52:2500-5.
12. **Peaper D.R.**, Havill N.L., Aniskiewicz M., Callan D., Pop O., Towle D., Boyce J.M. (2015). Pseudo-Outbreak of Actinomyces graevenitzii Associated with Bronchoscopy. J Clin Microbiol. 53:113-7.
13. Ruggero MA, **Peaper** DR, Topal JE. (2015). Telavancin for refractory methicillin-resistant Staphylococcus aureus bacteremia and infective endocarditis. Infect Dis (Lond). 47:379-84.
14. Banach DB, **Peaper DR**, Fortune BE, Emre S, Dembry LM. (2016). The clinical and molecular epidemiology of pre-transplant vancomycin-resistant enterococci colonization among liver transplant recipients. Clin Transplant. 30(3):306-11.
15. Green DA, Hitoaliaj L, Kotansky B, Campbell SM, **Peaper DR**. (2016). Clinical Utility of On-Demand Multiplex Respiratory Pathogen Testing among Adult Outpatients. J Clin Microbiol. 2016 Sep 21. [Epub ahead of print]

**Reviews and Chapters**

1. Cresswell P., Ackerman A.L., Giodini A., **Peaper D.R**., Wearsch, P.A. (2005) Mechanisms of MHC class I-restricted antigen processing and cross-presentation. Immunological Reviews 207: 145-157.
2. **Peaper D.R.** and Cresswell P. (2008) Regulation of MHC class I assembly and peptide binding. Annual Review of Cell and Developmental Biology 24: 343-68.
3. **Peaper D.R.** and Landry M.L. (2014) Laboratory Diagnosis of Viral Infection. Handbook of Clinical Neurology. 123:123-147.
4. **Peaper D.R.**, Landry M.L. (2014). Rapid Diagnosis of Influenza: State of the Art. Clin Lab Med. 34:365-385.
5. Murray T.S. and **Peaper D.R.** (2015). The Contribution of Extended-Spectrum β-Lactamases to Multidrug-Resistant Infections in Children. Curr. Opin. Pediatr. 27:124-131.

**Case Reports, Technical Notes, Letters**

1. Boyce J.M., Lee L., Topal J., **Peaper D.R.**, Balcezak T. (2014). Response to Mold Contamination of Intravenous Magnesium Sulfate Produced by a Compounding Pharmacy. JAMA Intern Med. 174:630-1.
2. Bandaranayake T.D., Paniz Mondolfi A., **Peaper** **D.R.**, Malinis M.F. (2015). Prototheca wickerhamii algaemia: an emerging infection in solid organ transplant recipients. Transplant Infectious Disease. 17:599-604.
3. Yamahiro A., Lau K.H., **Peaper D.R.**, Villanueva M. (2016). Meningitis Caused by Candida Dubliniensis in a Patient with Cirrhosis: A Case Report and Review of the Literature. Mycopathologia. 2016 Apr 1.