CURRICULUM VITAE
Vanessa Sperandio, Ph.D.

Personal information:

Vanessa Sperandio
Birth date: 12/30/1970
Citizenship: Brazilian and US
Telephone: 214-648 5619
FAX: 214- 648 5905
vanessa.sperandio@utsouthwestern.edu

Education:

Bachelors degree in Biological Sciences. Biology Institute. State University of Campinas. Campinas, SP, Brazil, 1988-1991.

Masters in Molecular Genetics, Department of Genetics, State University of Campinas. Campinas, SP, Brazil, 03/1992-03/1993. Advisor: Wanderley Dias da Silveira, Ph.D

Ph.D. in Molecular Genetics, Department of Genetics, State University of Campinas. Campinas, SP, Brazil, 03/1993-07/1995 (Training in the USA from 05/1993 until 10/1994). Advisor in Brazil: Wanderley Dias da Silveira, Ph.D. Advisor in the U.S.: James B. Kaper, Ph.D, Center for Vaccine Development, University of Maryland School of Medicine, Baltimore, MD, USA

Professional experience:

Postdoctoral fellow in the laboratory of Luis Rachid Trabulsi, M.D., Ph.D. Department of Microbiology. University of São Paulo, São Paulo, SP, Brazil, 08/1995- 07/1997

Postdoctoral fellow at the laboratory of James B. Kaper, Ph.D. Department of Microbiology and Immunology and Center for Vaccine Development. University of Maryland School of Medicine. Baltimore, MD, USA, 08/1997 – 06/2001.

Assistant Professor on tenure track at the Department of Microbiology, University of Texas Southwestern Medical Center. Dallas, TX, USA, 07/2001-09/2007.

Associate Professor tenured at the Department of Microbiology, University of Texas Southwestern Medical Center. Dallas, TX, USA, 09/2007-09/2011.

Associate Professor tenured (secondary appointment) at the Department of Biochemistry, University of Texas Southwestern Medical Center. Dallas, TX, USA, 09/2008-09/2011.

Professor tenured at the Departments of Microbiology and Biochemistry, University of Texas Southwestern Medical Center. Dallas, TX, USA, 09/2011-present.

Chair Molecular Microbiology Graduate Program. University of Texas Southwestern Medical Center. Dallas, TX, USA, 06/2007-09/2010

Supervised graduate rotation students:

1) 2001-2002: Marcie Clarke (then Marcie Cunningham) (third rotation)
Matthew Walters (second rotation)
2) 2002-2003: Laura Baugh (first rotation)
Kirthi Rhaman (second rotation)
Faith Sharp (third rotation)
Nicola Reading (third rotation)
3) 2004-2005: David Hughes (first rotation)
Noredia Ojogun (first rotation)
Elhadji Odum (second rotation)
Brian Ellis (third rotation)
Benjamin Habdas (fourth rotation)
4) 2007-2008: Matthew Jamison (summer rotation)
Alline Pacheco (first rotation)
Crystal Dobson (second rotation)
Robert Pollock (second rotation)
Jacqueline Njoroge (third rotation)
5) 2008-2009: Joseph Boll (first rotation)
Charley Grueber (second rotation)
6) 2009-2010: Andra Robinson (summer rotation)
Y. Nguyen (first rotation)
Grace Ellis and Annie Best (second rotation)
7) 2010-2011: Carl Gruberson (first rotation)
Paul Luethy (third rotation)
8) 2011-2012: Alyssa Jimenez (first rotation)
Reed Pifer (second rotation)
9) 2011-2012: Bryan Smith (first rotation)
10) 2012-2013: Shreya Endapally
Tsebao Beraki (second rotation)
11) 2014-2015: Animesh Mishra (third rotation)
12) 2015-2016: Peter Burnham (summer rotation)
Angel Jimenez Rodrigez (first rotation)
Aman Kumar (First rotation)
Tracy Rosales (Second rotation)
13) 2016-2017: Rachael Chanin (second rotation)
14) 2018-2019: Acacia Young (fourth rotation)
15) 2019-2020: Alexis Waller (first rotation)
Stacey Crockett (second rotation)
Nestor Ruiz (second rotation)

Graduate advisor:

Student: Mafalda Regina Bortolini. Department of Parasitology. University of São Paulo. São Paulo, SP, Brazil. Master thesis defended in August, 1998. Current position: Regional Documentation Management Group Leader at Boehringer Ingelheim Corporation. Vienna Austria.

Co-advisor for Bianca Cruz Neves. Department of Microbiology. University of São Paulo. São Paulo, SP, Brazil. Master thesis defended in December, 1998. Current position: Associate Professor. Chemistry Insitute. Federal University of Rio de Janeiro. Rio de Janeiro, Brazil.

Ph.D. thesis advisor for Marcie B. Clarke. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2002-thesis defended August 2005). Current position: Partner McArthur and English Patent Law. Boston MA.

Ph.D. thesis advisor for Matthew Walters. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2002-thesis defended June 2006). Current position: Medical Writer, Senior manager at Pfizer.

Maters thesis advisor for Faith C. Sharp. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2003-thesis defended July 2005). Current position: High school teacher. Illinois.

Ph.D. thesis advisor for Nicola C. Reading. Biologcal Chemistry graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2003-defended April 4th 2008). Current position: Medical Director at TRIPTYCH Health Partners. Dallas TX.

Ph.D. thesis advisor for David T. Hughes. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2005-defended June 22nd 2009). Current position: Senior research scientist Ohio State University. Cleveland OH.

Ph.D. thesis advisor for Benjamin Habdas. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2005-Defended Feb 19th 2010). Current position: Clinical Applications Consultant at Thermo Fisher Scientific. Dallas TX.

Ph.D. thesis advisor for Alline Pacheco. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2008-defended July 2012). Current position: Scientist at Evelo Biosciences. Boston MA.

Ph.D. thesis advisor for Jacqueline Njoroge. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2008-defended February 2012). Current position: Strategy Manager at Alcon. Dallas TX.

Ph.D. thesis advisor for Charley Grueber. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2009-defended December 2013). Current position: Post Doctoral Fellow at MIT. Boston MA.

Ph.D. thesis advisor for Y Nguyen. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2010-defended October 2014). recipient of the Sulkin award from the Molecular Microbiology program. Finalist for the Graduate school Nominata award. Current position: Senior research scientist USDA Maryland.

Ph.D. thesis advisor for Reed Pifer. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2011-defended June 2017). Current position: Post Doctoral fellow at the division of Infectious Diseases at UT Southwestern. Dallas TX.

Ph.D. thesis advisor for Animesh Mishra. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2015-2018 changed labs)

Ph.D. thesis advisor for Angel Jimenez Rodriguez. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2016-defended April 2020). Recipient of an under-represented minority supplement, recipient of the Sulkin award from the Molecular Microbiology program. Finalist for the Graduate school Nominata award. Current position: Post-doctoral fellow at the Microbiology department at UT Southwestern.

Ph.D. thesis advisor for Aman Kumar. Molecular Microbiology graduate program at U.T. Southwestern Medical Center in Dallas, TX. (2016-defended May 2020). Current position: Post-doctoral fellow Yale.

Exchange Ph.D. Student: Marcelo P. Sircili; Host-Parasite Interations Graduate Program, University of São Paulo, Brazil (December 2001-January 2003; thesis defended November 2004). Current position: Associate Professor at Insitute Butanta. Sao Paulo Brazil.

Exchange Ph.D. Student: Juliana P. Falcao; Microbiology Graduate Program, University of São Paulo, Ribeirao Preto, SP Brazil (March 2003- January 2004; thesis defended November 2004). Current position: Professor at School of Pharmaceutical Sciences of Ribeirao Preto. Ribeirao Preto SP Brazil.

Exchange Ph.D. Student: Cristiano G. Moreira; Host-Parasite Interations Graduate Program, University of São Paulo, Brazil (September 2003- October 2004; thesis defended April 2005). Current position: Associate Professor at UNESP university in Brazil

Exchange Ph.D. Student: Sergio Rocha; Host-Parasite Interations Graduate Program, University of São Paulo, Brazil (September 2008- March 2009. Thesis defended 2010). Current position: Assitant Professor at Londrina State University, Brazil.

Exchange Ph.D. Student: Fabiano Romao; Microbiology, Federal University of São Paulo, Brazil (April 2015- 2016. Thesis defended 2017). Current position: unknown

Exchange Ph.D. Student: Fernanda Pace; Molecular Genetics Graduate Program, University of Campinas, Brazil (January 2009- July 2009. Thesis defended 2010). Current position: Post-doctoral fellow Harvard.

Exchange Ph.D. Student: Fernanda Franzin; Molecular Genetics Graduate Program, University of Campinas, Brazil (May 2011- November 2011. Thesis defended 2012). Current position: unknown

Exchange Ph.D. Student: Fernando Martins; Microbiology, State University of Sao Paulo, Brazil (September 2016- March 2017). Current position: Post-doctoral fellow at UT Southwestern. Dallas TX.

Undergraduate advisor:

Students: Cristina Simao Seixas, Nilton Cesar Chopes and Marluci Monteiro Guirado. Department of Microbiology and Immunology, State University of Campinas (January 1995). Campinas, SP, Brazil.

Students: Jussara dos Santos da Silveira and Viviane Furlan Lozano. Program Aristides Leao to stimulate Science from the Brazilian Academy of Science in the Department of Microbiology, State University of Sao Paulo. (January and February, 1996). Sao Paulo, SP, Brazil.

Catherine Wakeman (Summer 2003), SURF undergraduate student.
Keiara Robinson (Summer 2007), SURF undergraduate student.
Joel Barrett (Summer 2014), SURF undergraduate student.
Alexander Lafrance (Summer 2015), SURF undergraduate student.
Brandon Barrett (Summer 2016), SURF undergraduate student.

Post-doctoral fellows:

-Carlos Esteban Nieto (April 2004-April 2006) Fellow at Imperial College
-Scott Waterman (February-November 2004) current position unknown
-Marcie Clarke (August 2005-January 2006) Patent Lawyer
-Melissa Kendall (January 2006-September 2012) Associate Professor at the University of Virginia. Had an NRSA. 2016 winner of the ASM Merk Irving S. Sigal Memorial awards.
-Cristiano G. Moreira (August 2006-March 2014) Associate Professor at UNESP university in Brazil
-Christopher Parker (March 2007-August 2012) Assistant Professor at Wesley University
-Shane Flickinger (September 2007-June 2008) current position unknown
-Darya Terekhova (September 2008-November 2011) Resident in Psychiatry Northwestern University
-Meredith M. Curtis (September 2009-August 2015) Assistant Professor at TCU
-Benjamin Habdas (March 2010-August 2011) Scientist at Thermo Fisher
-Juan David Hernandez (April 2012-March 2018) Research Associate at UT Southwestern
-Rosana Polifroni (September 2012-December 2012) Fellow University of Buenos Aires
-Kimberly Carlson-Banning (October 2013-September 2018) Home maker
-Ben Knowles (April 2014-May 2019) current position unkown
-Elizabeth Cameron (2014-2017) Has an NRSA. Is continuing her post-doc in collaboration with me at University of Minnesota
-Melissa Ellermann (2016-present)
-Zelia Garcia Menezes (2016-present)
-Thibaut Rosay (2017-present)
-Fernando Martins (2018-present)
-Santiago Cuesta (2018-present)

Supervising Professor for Research Assistant Professor:

David Rasko (July 2005-June 2008). Professor with tenure at the Institute for Genome Sciences, Department of Microbiology & Immunology, University of Maryland School of Medicine. AAM member

Teaching:

Medical school lectures:

1) November 2018:
    1.1. Introduction to bacteriology

2) November 2017:
    1.1. Introduction to bacteriology

3) November 2016:
    1.1. Introduction to bacteriology

4) November 2015:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

5) August 2015:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

6) August 2014:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

7) August 2013:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

87) August 2012:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

9)August 2011:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

10)August 2010:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

11) September 2009:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

12) September 2008:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

13) September 2007:
    1.1. Introduction to bacteriology
    1.2. Host parasite relationships: bacterial pathogenesis

14) September 2006:
    1.1. Introduction to bacteriology

1.2. Host parasite relationships: bacterial pathogenesis

15) September 2004:
2.1. Introduction to bacteriology
2.2. Host parasite relationships: bacterial pathogenesis

16) September 2003:
3.1. Introduction to bacteriology
3.2. Host parasite relationships: bacterial pathogenesis

17) September 2002:
4.1. Introduction to bacteriology
3.2. Host parasite relationships: bacterial pathogenesis

Medical school conferences (small group teaching) and laboratories:

2001-2002: 6 conferences; 3 laboratories
2002-2003: 7 conferences; 3 laboratories
2003-2004: 5 conferences; 3 laboratories
2004-2005: 3 conferences
2005-2006: 1 conference
2006-2007: 2 conferences
2011-2012: 1 conference

Graduate school lectures:

Core course DCBM/ DBS lectures:

1) March 2003: Cell biology of bacterial toxins
2) January 2004: Mechanisms of microbial pathogenesis
Cell biology of bacterial toxins
3) January 2005: Mechanisms of microbial pathogenesis
Cell biology of bacterial toxins
4) January 2006: Mechanisms of microbial pathogenesis
Cell biology of bacterial toxins
5) January 2007: Mechanisms of microbial pathogenesis
Cell biology of bacterial toxins
6) January 2008: Mechanisms of microbial pathogenesis
Cell biology of bacterial toxins
7) August 2011: Contemporary Genetic analyses of bacteria
8) September 2012: Contemporary Genetic analyses of bacteria
9) August 2013: Contemporary Genetic analyses of bacteria
10) August 2013: Contemporary Genetic analyses of bacteria
11) August 2014: Contemporary Genetic analyses of bacteria
12) September 2015: Contemporary Genetic analyses of bacteria
13) September 2016: Contemporary Genetic analyses of bacteria
14) September 2017: Contemporary Genetic analyses of bacteria
15) September 2018: Contemporary Genetic analyses of bacteria
16) August 2019: Contemporary Genetic analyses of bacteria

DCBM Elective Microbiology: December 2002: Bacterial Toxins

DBS Elective: Molecular mechanisms of infectious diseases:

1) Spring 2004: Motility and flagella synthesis
   Quorum sensing
2) Spring 2005: Motility and flagella synthesis
   Quorum sensing
3) Spring 2006: Motility and flagella synthesis
   Quorum sensing
4) Spring 2007: Motility and flagella synthesis
   Quorum sensing
5) Spring 2008: Motility and flagella synthesis
   Quorum sensing
6) Spring 2009: Quorum sensing
7) Spring 2010: Bacterial toxins
8) Spring 2011: Bacterial toxins
9) Spring 2012: Bacterial toxins

Biochemistry graduate program:

Co-coordinated Journal club 01 to 04-2007 Host-microbial interactions.
Co-coordinated Journal club 01 to 04-2011 Microbial signaling

Molecular Microbiology graduate program lectures:

Coordination of the Molecular Pathogenesis of Infectious Disease course 2003-2008.

Co-coordinated Topics in Microbiology journal club Fall 2012

Lectures on the Microbial Pathogenesis of Infectious Disease course:

1) 2002: *E. coli* and *Shigella*
   Quorum sensing
2) 2003: *E. coli* and *Shigella*
   Quorum sensing
3) 2004: *E. coli* and *Shigella*
   Vibrio cholerae
4) 2006: *E. coli* and *Shigella*
5) 2007: *E. coli* and *Shigella*
6) 2008: *E. coli* and *Shigella*
7) 2009: *E. coli* and *Shigella*
8) 2013: Bacterial Toxins
9) 2014: Bacterial Toxins
10) 2015: Bacterial Toxins
11) 2016: Bacterial toxins
12) 2017: Bacterial toxins
13) 2018: Bacterial Toxins
14) 2019: Bacterial Toxins
15) 2020: Bacterial Toxins

Lectures on the Microbial Genetics course:

1) 2001: Global regulatory factors 1
   Global regulatory factors 2 (flagella and motility)
2) 2002: Global regulatory factors 1
   Global regulatory factors 2 (flagella and motility)
3) 2003: Global regulatory factors 1
   Global regulatory factors 2 (flagella and motility)
4) 2004: Global regulatory factors
   Mutagenic strategies in bacteria
5) 2006: Global regulatory factors
   Mutagenic strategies in bacteria
6) 2007: Global regulatory factors
   Mutagenic strategies in bacteria
7) 2008: Global regulatory factors
   Mutagenic strategies in bacteria
8) 2009: Global regulatory factors
9) 2010: Global regulatory factors
   Quorum sensing
10) 2011: Global regulatory factors
   Quorum sensing
11) 2012: Global regulatory factors
   Quorum sensing
13) 2013: Global regulatory factors
   Quorum sensing
14) 2014: Global regulatory factors
   Quorum sensing
   Non coding sRNAs
15) 2015: Global regulatory factors
   Quorum sensing
   Non coding sRNAs
16) 2016: Global regulatory factors
   Quorum sensing
   Non coding sRNAs
17) 2017: Global regulatory factors
   Quorum sensing
   Non coding sRNAs
18) 2018: Global regulatory factors
   Quorum sensing
   Non coding sRNAs
19) 2019: Global regulatory factors
   Quorum sensing
   Non coding sRNAs
20) 2020: Global regulatory factors
   Quorum sensing
   Non coding sRNAs

Lectures on Immunobiology of infectious diseases

1) 2007: Gut pathogens/ EHEC
2) 2008: Gut pathogens/ EHEC
3) 2009: Gut pathogens/ EHEC
4) 2010: Gut pathogens/ EHEC
5) 2011: Gut pathogens/ EHEC
6) 2012: Gut pathogens/ EHEC
7) 2013: Gut pathogens/ EHEC
8) 2014: Gut pathogens/ EHEC
9) 2015: Gut pathogens/ EHEC
10) 2016: Gut pathogens/ EHEC
11) 2017: Gut pathogens/ EHEC

Graduate Microbiology program. Lecture on Bacterial gene regulation by quorum sensing (11/ 2000). University of Maryland School of Medicine, Baltimore, MD.

Graduate Microbiology program. Lecture on Bacterial gene regulation by quorum sensing (11/ 1999). University of Maryland School of Medicine, Baltimore, MD.

Graduate Microbiology and Immunology program. Lecture on Structure and replication of DNA (03/1995). State University of Campinas, Campinas, SP, Brazil.

Graduate Microbiology program. Lecture on Celular and molecular mechanisms of pathogenesis (03/1995). University of Sao Paulo, SP, Brazil.

Graduate Microbiology program. Lecture in Advanced topics in virulent *Escherichia coli* (12/1995). State University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil.

Graduate Microbiology program. Co-coordenation of graduate course: Physiology of the bacterial cell (03-06/1996). State University of Sao Paulo, Sao Paulo, SP, Brazil.

School of Medicine. Medical Microbiology. Lecture in Mechanisms of bacterial pathogenesis (03/1996). State University of Sao Paulo, Sao Paulo, SP, Brazil.

School of Pharmacy Graduate Program. Lecture in Virulence factors of gram-negative microorganisms (05/1996). State University of Sao Paulo, Sao Paulo, SP, Brazil.

School of Pharmacy Graduate Program. Lecture in Virulence gene regulation (06/1996). State University of Sao Paulo, Sao Paulo, SP, Brazil.

Undergraduate Biology bachelors program. Lecture in Pathogenesis, virulence and microbial flora (06/1996). State University of Sao Paulo, SP, Brazil.

School of Medicine. Medical Microbiology. Lecture in Bacterial pathogenesis (03/1997). State University of Sao Paulo, Sao Paulo, SP, Brazil.

Course on Bacterial Genetics. USP. Brazil (09/2007)

Course on Bacterial Pathogenesis. UNICAMP. Brazil (05/2009)

Course on Bacterial Genetics. UFRGS. Brazil (03/2014)

Committees:

Dissertation committees outside UT Southwestern Medical Center:

Masters in Microbiology, University of Sao Paulo, Sao Paulo, Brazil. Student: Tania Leiko Tanaka (07/02/1996).

Masters in Microbiology, University of Sao Paulo, Sao Paulo, Brazil. Student: Mafalda Bortolini (07/02/1998).

Ph.D. in Microbiology, University of Sao Paulo, Sao Paulo, Brazil. Student: Marcelo P. Sircili (09/2004).

Ouside reader. Ph.D. dissertation for the Microbiology Graduate Program at Yale University. Student: Michelle Laskowski-Arce (2006).

Ph.D. in Molecular and Cell Biology, Federal University of Rio Grande do Sul, Brazil: Nicole Lima Barbieri (03/2014).

Dissertation committees: Molecular Microbiology graduate program.

Students: Drew Revel (defended February 2005)
Audrey Almengor (defended December 2005)
Daniel Clarke (defended January 2006) chair
Jennifer Trotsky (defended 2007) chair
Marcie Clarke (defended August 2005)
Matthew Walters (defended June 2006)
Faith Sharp (defended July 2005)
Heather Cash (defended June 2006) chair
Dara Burdett (defended April 2009)
Stephanie Joslin (defended April 2009) chair
Catherine Wakeman (Defended October 2009) chair
David Hughes (Defended June 2009)
Benjamin Habdas (Defended February 2010)
Melanie Yarborough (defended February 2008) chair
Andrea Erickson (defended 2008) chair
Amanda Leone (defended October 2009)
Kiran Mir (Defended October 2010)
David Owen (defended June 2009)
Murat Balaban (defended March 2011)
Alline Pacheco (defended July 2012)
Jacqueline Njoroge (defended February 2012)
Christopher Broberg (defended February 2011)
Jamaal Benjamin (defended July 2013) chair
Andrey Seluynin (Defended December 2013)
Victor Ocasio (Defended July 2014) chair

Charley Gruber (Defended December 2013)
Y Nguyen (Defended October 2014)
TJ Calder (Defended July 2014) chair
Joseph Boll (Defended April 2013)
Paul Luethy (Defended May 2015)
Robert Orchard (Defended February 2013)
Cara Spanel-Weber (Left with Masters 2014)
Chelsea Stamm (defended 2019) chair
Alyssa Jimenez (defended May 2017) chair
Breanna Pasco (defended 2020)
Reed Pifer (defended June 2017)
Elizabeth Luper (present) chair
Animesh Mishra (exited from committee 2018)
Caroline Gills (defended 2018)
Justin Hansen (present)
Peter Burham (present)
Kyle Goodman (defended May 2020)
Aman Kumar (defended May 2020)
Angel Jimenez (defended April 2020)
Raechel Chanin (present) (chair)
Virginia Ray (present)

Dissertation committees: Biological Chemistry graduate program.

Students: Jason Tuckerman (defended May 2010) chair
Nicola Reading (defended April 2008)
Irnov (defended November 2010) chair
Jeongmi Lee (defended June 2008)
Olivia Lee (defended July 2009) chair
Grace Ellis (not known)

Dissertation committees: Integrative Biology graduate program.

Student: Fang Zhang (defended September 2015)

Dissertation committees: Immunology graduate program

Student: Xiaming Zhang (left program)

Qualifying committees: Molecular Microbiology graduate program..

Students: Cheryl Vahling (2002) chair
Jason Mock (2003) chair
Ahmed Attia (2003) chair
Daniel Clarke (2003)
Jennifer Trotsky (2004) chair
Tracy Kinkel (2005) chair
Erin Webster (2006) chair

Melanie Yarborough (2006)
Murat Balaban (2007) chair
Bray Denard (2009)
Andrey Selyunin (2010) chair
TJ Calder (2011) chair
Victor Ocasio (2011)
Paul Luethy (2012) chair
Yao Wang (2013) chair
Breanna Pasco (2014) chair
Rajshri Ganesh Iyer (2016) chair
Peter Burnham (2017) chair
Raechel Chanin (2018) chair
Virginia Ray (2019)
Savannah Taylor (2020) chair
Umaru Barrie (2020)

Qualifying Committees: Biological chemistry graduate program.

Students: Rebecca Lehotzky (2006)
Irnov (2007)
Anju Sreelatha (2011)
Albert Linden (2012)
Andrea Rodriguez (2013) chair
Aloysius Lawong (2017)

Other committees:

Head of the Faculty search committee. Department of Microbiology. UT Southwestern. 2019-present

Search Committee for the Director of the Cecil H. and Ida Green Comprehensive Center for Molecular, Computational, and Systems Biology, UTSW. 2019-present

Member of the ASM Microbe Publishing Committee. 2019-present

Chair HMB track for ASM Microbe Program Committee 2019-2021

UTSW Graduate School awards committee 2016-2017

Chair UTSW Graduate School awards committee 2017-2019

Member of the ASM Microbe Program Committee 2017- 2019

Member of the Advisory board of Projeto Serrapilheira Brazil. 2017-2019.

Post-doctoral fellows and graduate students awards committee UTSW. 2017-2019.

Member of the Nominating Committee for the ASM board of directors and COMS 2017-present.

International planning committee for the 10th VTEC meeting 2018.

Member of the Advisory Committee for the Burroughs Wellcome Fund's Investigators in the Pathogenesis of Infectious Diseases 2016-present

Member of the National Advisory Committee of the Pew Latin American Fellows Program 2015-present

Chair of the ASM Press committee 2016-2021.

Chair of the ASM Education Awards selection committee 2015-2019.

Chair of Division D of the American Society for Microbiology 2015/2016.

American Academy of Microbiology Ad-Hoc committee on nominations to fellowship (2013)

ASM selection committee for the Graduate Microbiology Teaching Award (2013)

Search committee for chief of Infectious Diseases (2011-2013)

Molecular Microbiology Graduate program steering committee (present)

Head of the Faculty search committee. Department of Microbiology, U.T. Southwestern Medical Center, Dallas, TX. (2011-2013)

Faculty search committee. University of Texas at Dallas (2005 to 2006).

Division of Cell and Molecular Biology (DCBM) steering committee (2003), U.T. Southwestern Medical Center, Dallas, TX.

Faculty Senate at U.T. Southwestern Medical Center 2003-2006.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2005), U.T. Southwestern Medical Center, Dallas, TX.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2007), U.T. Southwestern Medical Center, Dallas, TX.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2008), U.T. Southwestern Medical Center, Dallas, TX.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2009), U.T. Southwestern Medical Center, Dallas, TX.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2011), U.T. Southwestern Medical Center, Dallas, TX.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2012), U.T. Southwestern Medical Center, Dallas, TX.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2013), U.T. Southwestern Medical Center, Dallas, TX.

Ph.D. and Postdoctoral Research Training 6 year plan Committee (2014), U.T. Southwestern Medical Center, Dallas, TX.

Post doctoral research training committee (2013), U.T. Southwestern Medical Center, Dallas TX

Division of basic science (DBS) steering committee 2007-2010.

Michael Shiloh (Assistant Professor-Infectious Dieseases department) mentoring committee

David Greenberg (Assistant Professor-Infectious Dieseases department) mentoring committee

Overseeing committee for the Pharmacology core at UT Southwestern Medical Center, Dallas, TX (present)

Membership in Scientific Societies:

-American Society for Microbiology
-American Association for the Advancement of Science
-Brazilian Genetics Society

Honors and awards:

1) NIH Merit award for grant AI053067 in 2017

2) Member of the Advisory Committee for the Burroughs Wellcome Fund's Investigators in the Pathogenesis of Infectious Diseases 2016

3) Member of the National Advisory Committee of the Pew Latin American Fellows Program 2015-present

4) Recipient of the 2015 ASM Eli-Lilly and Company-Elanco research award

5) Winner of the GSK Discovery Fast Track challenge program 2014

6) Selected to participate in the National Academy of Sciences NAKFI Collective behavior from cells to society meeting 2014

7) Speaker at the National Academy of Sciences 25th annual US Kavli Frontiers of Science symposium. November 2013, Irvine, CA.

8) Elected to the American Academy of Microbiology 2013.

9) Chair pre-symposium of type three secretion effectors of the verotoxin-producing *E. coli* (VTEC) 2012 meeting. Amsterdam May 2012

10) Chair genetics and virulence session VTEC 2012 meeting Amsterdam. May 2012

11) Scientific organizing committee VTEC 2012 Amsterdam.

12) Invited speaker at the Forum of Microbial Threats, Board on global health, Institute of Medicine, the National Academies. Worskshop "Social Biology of Microbial Communities" Washington DC. March 2012

13) Invited Speaker at the Workshop from the Institute of Microbiology and Infectious diseases "Bacterial evasion to anti-infectives: from gene to public health. France. January 2012. (Organized by Philippe Sansonetti)

14) Meeting planning committee for the National Academy of Sciences 1st US /Indonesia Kavli Frontiers of Science symposium. July 2011, Jakarta, Indonesia.

15) Invited Speaker at the Symposium of Dimensions of Microbiology. The National Academies of Science division on Earth and Life Studies. Washington DC. April 2011.

16) Selected as University Lecture series speaker at UT Southwestern Medical Center (September 2010)

17) Invited Speaker at the Wellcome Trust's Frontiers Meeting "Applying new technologies to the epidemiology, prediction, and control of antibiotic resistance in developing countries". Stellenbosch, South Africa. February 2010.

18) Meeting planning committee for the National Academy of Sciences 21st annual US Kavli Frontiers of Science symposium. November 2009, Irvine, CA.

19) Meeting planning committee for the National Academy of Sciences 20th annual US Kavli Frontiers of Science symposium. November 2008, Irvine, CA.

20) Speaker at the National Academy of Sciences 19th annual US Kavli Frontiers of Science symposium. November 2007, Irvine, CA.

21) Kavli Frontiers of Science Fellow, National Academy of Science, 2007

22) High Risk High Impact research award, UT Southwestern Medical Center (07/2007-07/2008)

23) Burroughs Wellcome Fund for Investigator in Pathogenesis of Infectious Diseases (07/2006-07/2011).

24) Ellison Medical Foundation New Scholar Award in Global Infectious Diseases. (08/2004-08/2008).

25) Dam Charitable foundation travel grant. 4th International symposium and workshop in Shiga-toxin (Verotoxin) producing *Escherichia coli* (Kyoto, Japan). October 29th to November 2nd, 2000.

26) Pew Latin American Fellow in Biomedical Sciences. (08/1997-08/1999)

27) Post-doctorate fellowship award from Brazilian National Research Council (CNPq). (07/1995-07/1997).

28) Training fellowship from Brazilian Federal Funding Agency (CAPES) (05/1997-06/1997).

29) Doctorate fellowship award for training abroad from CAPES. (05/1993-05/1994).

30) Doctorate fellowship award for training abroad from CNPq. (05/1994-10/1994).

31) Masters fellowship award from Sao Paulo State Funding Agency (FAPESP) (03/1992-03/1993)

32) Undergraduate Scientific training fellowship award from FAPESP. (03/1991-03/1992).

Funding:

Active:

National Institutes of Health RO-37 AI053067 grant: Quorum sensing regulation of EHEC virulence genes. 01/2018 to 12/2022 (U$ 350,000 yearly direct costs). Role: PI Merit awards

National Institutes of Health RO-1 AI114511 grant: Tryptophan derivatives in EHEC pathogenesis. 12/01/14 – 11/30/20 (U$283,032 yearly direct costs) (1 year no cost extension). Role: PI

National Insitutes of Health 2R56AI105135 grat: Sugar Regulation of EHEC virulence. 09/01/2018-08/31/2020 (U$338,278 yearly direct costs) (1 year no cost extension). Role: PI

National Institutes of Health RO-1 AI 154597 grant: Sugar Regulation of EHEC virulence (A0 of 2R56AI105135). 07/01/20 – 06/30/25 (U$433,419 requested yearly direct costs). Role: PI Scored 1%

Completed projects:

National Institutes of Health 2RO-1 AI077613 grant: SdiA regulation of EHEC virulence. 08/2014 to 07/2019 (U$ 235,000 yearly direct costs) (1 year no cost extension). Role: PI

National Institutes of Health RO-1 AI05135 grant: Sugar regulation of EHEC virulence. 07/01/13 – 06/30/18 (U$250,000 yearly direct costs (1 year no cost extension). Role: PI

NIH/NIAID 3R01AI053067-14S1 (PI: Sperandio) grant: Quorum sensing regulation of EHEC virulence genes. 6/01/2016-12/31/2017 ($76,663). This is a diversity supplement to support a graduate student working on this project.

National Institutes of Health R21 AI101472 grant: Host pathogen signaling in the intestine. 07/2012 to 06/2015 (U$ 125,000 yearly direct costs). Role: PI

Burroughs Wellcome Fund for Investigators in Pathogenesis of Infectious Diseases: Interkingdom signaling in bacterial pathogenesis. 07/2006 to 06/2013. (U$80,000 yearly direct costs) Role: PI

National Institutes of Health UO1 grant: AI-3 inhibitors as treatment for bacterial infections. 06/2008 to 05/2013 (U$ 1,326,853 yearly direct costs). Role: PI

National Intitutes of Health PO-1 grant (PO1-PI Dr. Michael V. Norgard): Molecular Biology of *Francisella tularensis* Virulence. PI on section: Genetics of virulence expression by *F. tularensis*. 9/2003 to 03/2009 (no cost extension) (U$ 194,533 yearly direct costs).

High Risk High Impact award. 07/2007 to 07/2008 (U$75,000 yearly direct costs) Role: PI

National Institutes of Health RO3 grant: Screen for quorum sensing molecular inhibitors. 11/05 to 11/ 06 (U$50,000 yearly direct costs). Role: PI

National Institutes of Health R21 grant: EHEC interactions with the normal intestinal flora. 04/2003 to 04/2005 (extended 04/2006) (U$150,000 yearly direct costs). Role: PI

Ellison foundation New Scholar Award in Global Infectious Diseases: Cell-to-cell signaling in *E. coli* O157:H7 pathogenesis. 8/2004 to 8/2008 (U$ 50,000 yearly direct costs). Role: PI

Editorial tasks:

Edited the second edition of the American Society for Microbiology book: Enterohemorrhagic and Shiga Toxin producing *Escherichia coli.* 2015

Edited an issue of Current Oppinion in Microbiology published in April 2012

Editorial Board member:
mBio
Infection and Immunity
Microbiology (resigned February 2012)
Journal of Bacteriology
Brazilian Journal of Microbiology
Gut Microbes

Ad Hoc Reviewer Journals:
Science
Nature
eLife
PLoS Genetics
Nature Chemical Biology
Nature Immunology
Nature communications
Nature Microbiology
Science Reports
PNAS
Cell Host Microbe
PLoS pathogens
PLoS genetics
PLoS one
Trends in Microbiology
Molecular Microbiology
Microbiology

Chemistry and Biology
FEMS Microbiology Letters
FEMS Microbiology Reviews
Applied Environmental Microbiology
EMBO Reports
Journal of Clinical Microbiology
Cellular Microbiology
Journal of Biological Chemistry
AAC ASM

Ad Hoc Editor: *PLoS pathogens*

Advisory grant review panels

Member of the Advisory Committee for the Burroughs Wellcome Fund's Investigators in the Pathogenesis of Infectious Diseases (2016-present)

Member of the National Advisory board for the Pew Latin American Fellows program in Biological Sciences (2015-present)

Member study sections: *NIH HIBP study section (October 2009-June 2013), NIH BACP study section (October 2019-June 2023)*

Ad Hoc Reviewer Granting Institutions: *National Institutes of Health (BM2, BACP, HIBP, GMPB, R21, MIRA)*

National Science Foundation
Department of Energy
John Sealy Memorial Endowment Fund for Biomedical Sciences
NSERC Canada
South Plains Foundation
Wellcome trust (UK)
BBRSC (UK)
European Research Council

Meeting planning committees:

Scientific organizing committee VTEC 2021 Banff, Canada.

Scientific organizing committee VTEC 2018 Florence, Italy.

Meeting planning committee for the National Academy of Sciences 20th annual Kavli Frontiers of Science symposium. November 2008, Irvine, CA.

Meeting planning committee for the National Academy of Sciences 21st annual Kavli Frontiers of Science symposium. November 2009, Irvine, CA.

Meeting planning committee for the National Academy of Sciences 1st US /Indonesia Kavli Frontiers of Science symposium. July 2011, Jakarta, Indonesia.

REGEM, Microbial Genetics meetings. Brazil September 2012

Scientific organizing committee VTEC 2012 Amsterdam.

ASM Microbe Program Committee for 2017, 2018, 2019, 2020-2023 (Chair HMB track 2020-2021)

Publications:

1) Sperandio, V. and Silveira, W. D. 1993. Comparison between enterotoxigenic *Escherichia coli* strains expressing "F42", F41 and K99 Colonization Factors. *Microbiol. Immunol***.,** **37**(11), 869-875. PMID7905184.

2) Sperandio, V., Girón, J. A., Silveira, W. D., and Kaper, J. B. 1995. The OmpU Outer Membrane Protein: a Potential Adherence Factor of *Vibrio cholerae*. *Infect.Immun.,* **63**(11), 4433-4438. PMID7591082. PMCID PMC173631.

3) Girón, J.A., Viboud, G.I., **Sperandio, V**., Gomez-Duarte, O.G., Maneval, D.R., Albert, M.J., Levine, M.M., and Kaper, J.B.1995. Prevalence and association of Longus Pilus structural gene (*lgnA*) with colonization factor antigens, enterotoxin types, and serotypes of enterotoxigenic *Escherichia coli*. *Infect. Immun.*, **63** (10):4195-4198. PMID7558343. PMCID PMC173594

4) Sperandio, V., Bailley, C., Girón, J.A., DiRita, V.J., Silveira, W.D., Vettore, AL. and Kaper. 1996. Cloning and characterization of the gene encoding the OmpU outer membrane protein of *Vibrio cholerae*. *Infect. Immun*, **64**:5406-5409. PMID8945596. PMCID PMC174538.

5) Gonçalves, AG., Campos, L.C., Gomes, T.AT., Rodrigues, J. **Sperandio, V.,** Whittam, T.A, and Trabulsi, L.R. 1997. Virulence properties and clonal structure of strains of *Escherichia coli* O119 serotypes. *Infect. Immun.* **65**:2034-2040. PMID9169729. PMCID PMC175281.

6) Sperandio, V., Kaper, J.B., Bortolini, M.R., Neves, B.C., Keller, R., and Trabulsi, L.R. 1998. Characterization of the locus of enterocyte effacement (LEE) in different enteropathogenic *Escherichia coli* (EPEC) and Shiga-toxin producing *Escherichia coli* (STEC) serotypes. *FEMS Microbiol Lett.* **164**:133-139. PMID9675859.

7) Neves, B.C., Knutton, S., Trabulsi, L.R., **Sperandio, V.,** Kaper, J.B., Dougan, G., and Frankel G. 1998. Molecular and ultrastructural characterisation of EspA from different enteropathogenic *Escherichia coli* serotypes. *FEMS Microbiol. Lett*. **169**:73-80. PMID9851036.

8) Bortolini, M.R., Trabulsi, L.R., Keller, R., Frankel, G. and **Sperandio, V**. 1999. Lack of expression of bundle-forming pili in some clinical isolates of enteropathogenic *Escherichia coli* (EPEC) is due to a conserved large deletion in the *bfp* operon. *FEMS Microbiol. Lett.* **179**: 169-174. PMID10481102.

9) Pelayo, J.S., Scaletsky, I.C.A., Pedrozo, M.Z., **Sperandio, V**., Giron, J.A., Frankel, G., and Trabulsi, L.R. 1999. Virulence properties of atypical EPEC strains *J. Med. Microbiol*. **48**: 41-9. PMID9920124.

10) Sperandio, V., Mellies, J.L., Nguyen, W., Shin, S. and Kaper, J.B. 1999. Quorum sensing controls expression of the type III secretion gene transcription and protein secretion in enterohemorrhagic and enteropathogenic *Escherichia coli*. *Proc. Natl. Acad. Sci. USA* **96**: 15196-15201. **[Comments about this**

manuscript: Gruenheid, S. and Finlay, B.B. 2000. Crowd control: quorum sensing in pathogenic *E. coli*. *Trends Microbiol*. 8(10): 442-3] PMID10611361. PMCID PMC24796.

11) Mellies, J.L., Elliott, S.J., **Sperandio, V**., Donnenberg, M.S. and Kaper, J.B. 1999. The Per regulon of enteropathogenic *Escherichia coli*: identification of a regulatory cascade and a novel transcriptional activator, the locus of enterocyte effacement (LEE)-encoded regulator (Ler). *Mol. Microbiol*. **33**: 296-306. PMID10411746.

12) Sperandio, V.*, Mellies, J.L.*, Delahay, R.M., Frankel, G., Crawford, J.A., Nguyen, W. and Kaper, J.B. 2000. Activation of enteropathogenic *E. coli* (EPEC) *LEE2* and *LEE3* operons by Ler. *Mol. Microbiol*. **38**: 781-793. *Co-first authors. PMID11115113.

13) Sperandio, V. 2000. The elusive type III secretion signal. *Trends in Microbiol*. 8(9):395. PMID10989305.

14) Sperandio, V. 2000. How the bacterial flora and the epithelial cell get along. *Trends in Microbiol*. 8(12):544. PMID11115746.

15) Elliott, S.J., **Sperandio, V**., Girón, J.A., Shin, S., Mellies, J.L., Wainwright, L.A., Hutcheson, S.W., McDaniel, T.K. and Kaper, J.B. 2000. The Locus of enterocyte effacement (LEE)-encoded regulator (Ler) controls expression of both LEE and non-LEE encoded virulence factors in enteropathogenic and enterohemorrhagic *Escherichia coli*. *Infect. Immun*. **68**: 6115-6126. PMID11035714. PMCID PMC97688.

16) Sperandio, V., Torres, A.G., Girón, J.A. and Kaper, J.B. 2001. Quorum sensing is a global regulatory mechanism in enterohemorrhagic *Escherichia coli* (EHEC) O157:H7. *J. Bacteriol.* **183**: 5187-97. PMID11489873. PMICD PMC95396.

17) Sperandio V. 2001. Genome sequence of *E. coli* O157:H7. *Trends in Microbiol*. 9(4): 159. PMID11286870

18) Sperandio, V., Li, C.C. and Kaper, J.B. 2002. Quorum-sensing *Escherichia coli* regulator A: a regulator of the LysR family involved in the regulation of the locus of enterocyte effacement pathogenicity island in enterohemorrhagic *E. coli*. *Infect*. *Immun.* **70**: 3085-3093. PMID12011002. PMCID PMC127966.

19) Sperandio, V., Torres, A.G., and Kaper, J.B. 2002. Quorum sensing *Escherichia coli* regulators B and C (Qse BC): a novel two-component regulatory system involved in the regulation of flagella and motility by quorum sensing in *E. coli*. *Mol. Microbiol*. **43**:809-821. PMID11929534.

20) Sperandio V. 2002. Quorum sensing in *Pseudomonas aeruginosa*: yet another player. *Trends in Microbiol*. 10(3): 118. PMID11864819.

21) Sperandio V. 2002. Flagella: multipurpose structures in EPEC. *Trends in Microbiol*. 10(6): 262.

22) Sperandio V. 2002. A Sticky business in EHEC pathogenesis. *Trends in Microbiol.* 10(11):491.

23) Sperandio, V., Torres, A.G., Jarvis, B., Nataro, J.P. and Kaper, J.B. 2003. Bacteria-host communication: the language of hormones. *Proc. Natl. Acad. Sci. USA*. **100**: 8951-8956. **(First and corresponding author; first manuscript from UTSW)**
[Comments about this manuscript: Winzer, K., and Williams P. 2003. *Escherichia coli* gets the message. *Nat. Med*. 9(9): 1118-9; Saunders, J. 2003. Microbial pathogenesis: conversations with EHEC. Prelaunch Highlights. *Nat. Rev. Microbiol*.; Brian Hoyle. 2003. Stress hormone, gut flora aid in establishing EHEC infections. Current Topics, ASM News Vol. 69, Oct 2003; Selected as one of the TOP 10 articles in the field of biology in August 2003 by the Faculty of 1000] PMID12847292. PMCID PMC166419.

24) Sircili, M.P., Walters, M., Trabulsi, L.R., and **Sperandio, V**. 2004. Modulation of enteropathogenic Escherichia coli virulence by quorum sensing. *Infect. Immun.* **72**: 2329-2337. PMID15039358. PMCID PMC375187.

25) Falcao, J.P., Sharp, F., and **Sperandio V.** 2004. Cell-to-cell signaling in intestinal pathogens. *Current Issues in Intestinal Microbiology* **5**: 9-18. (invited publication). PMID15055923.

26) Sperandio V. 2004. Striking a balance: inter-kingdom cell-to-cell signaling, friendship or war? *Trends in Immunol.* 25 (10):505-507 (Invited publication). PMID15364050.

27) Jordan, D.M., **Sperandio, V**., Kaper, J.B., Moon, H.W. 2005. Colonization of gnotobiotic piglets by a *luxS* mutant strain of *Escherichia coli* O157:H7. *Infect. Immun***. 73**: 1214-1216. PMID15664967. PMCID PMC547016.

28) Clarke, M.B., and **Sperandio V.** 2005. Cell-to-cell signaling microbial flora, host and pathogens: there is a whole lot of talking going on. The American Journal of Physiology Gatrointerest Liver Physiol. 288: G1105-G1109 (Invited publication). PMID15890712.

29) Kaper, J.B. and **Sperandio, V.** 2005. Bacterial cell-to-cell signaling in the gastrointestinal tract. *Infect. Immun*. 73: 3197-3209. PMID15908344. PMCID PMC1111840.

30) Clarke, M.B., and **Sperandio V**. 2005.Transcriptional autoregulation by quorum sensing *E. coli* regulators B and C (QseBC) in enterohemorrhagic *E. coli* (EHEC). *Mol. Microbiol*. 58: 441-455. PMID16194231.

31) Clarke, M.B. and **Sperandio, V.** 2005. Transcriptional regulation of *flhDC* by QseBC and σ^{28} (FliA) in EHEC. *Mol. Microbiol*. 57: 1734-1749. PMID16135237.

32) Moreira, C.G., Palmer, K., Whiteley, M., Sircili, M.P., Trabulsi, L.R., Castro, A.F.P., and **Sperandio, V**. 2006. Bundle forming pili (BFP) and EspA are involved in biofilm formation by Enteropathogenic *Escherichia coli* (EPEC). *J. Bacteriol.* 188: 3952-3961.PMID16707687. PMCID PMC1482920.

33) Walters, M. and **Sperandio, V.** 2006. AI-3/epinephrine signaling in the kinetics of LEE gene expression in EHEC. *Infect. Immun.* 74: 5445-5455. PMID16988219. PMCID PMC1594898.

34) Walters, M. and **Sperandio, V.** 2006. Quorum sensing in *E. coli* and *Salmonella*. *International Jornal of Medical Microbiology*. 296: 125-31 (Invited publication). PMID16487745

35) Reading, N.C. and **Sperandio, V.** 2006. Quorum sensing: the many languages of bacteria. FEMS Microbiol. Lett 254 (1-11) (Invited publication). PMID16451172

36) Clarke, M.B, Hughes, D.T., Zhu C., Boedeker, E.C. and **Sperandio, V**. 2006. The QseC sensor kinase: a bacterial adrenergic receptor. *Proc. Natl Acad. Science* U.S.A. 103:10420-10425. **[Comments about this manuscript: Nat. Rev. Microbiol. 2006 4: 569. Microbe Magazine. October 2006. Selected as one of the TOP 10 articles in the field of microbiology in August 2006 by the Faculty of 1000].** PMID 16803956. PMCID PMC1482837.

37) Walters, M., Sircili, M.P., and **Sperandio, V.** 2006. AI-3 synthesis is not dependent on *luxS* in *E. coli*. *J. Bacteriol.* 188: 5668-5681. **[Rated as one of J. Bacteriol.'s 20 top papers]** PMID16885435. PMCID PMC150066.

38) Reading, N.C., Torres, A.T., Kendall, M.M., Hughes, D.T., Yamamoto, K. and **Sperandio, V.** 2007. A novel two-component system that activates transcription of an enterohemorrhagic *E. coli* (EHEC) effector involved in remodeling of host actin. *J. Bacteriol*. 189: 2468-2476. PMID17220220. PMCID PMC1899401.

39) Kendall, M.M. and **Sperandio, V.** 2007. Quorum sensing by enteric pathogens. Current Oppinion in Gastroenterology. 23: 10-15. PMID17133078

40) Waldor, M.K. **and Sperandio, V.** 2007. Adrenergic regulation of bacterial virulence. J. Infect. Dis. 195:1248-1249. PMID17396992. PMCID OMC2613639.

41) Russell, R.M., Sharp. F.C., Rasko, D.A. and **Sperandio, V.** 2007. QseA and GrlR/A regulation of the LEE genes in enterohemorrhagic *E. coli* (EHEC). *J. Bacteriol*. 189:5387-92. PMID17496094. PMCID PMC1951852.852.

42) Sharp, F.C., and **Sperandio, V.** 2007. QseA directly activates transcription of *LEE1* in enterohemorrhagic *E. coli* (EHEC). *Infect. Immun.* 75:2432-2440. PMID17339361. PMCID PMC1865749.

43) Rasko, D.A., Esteban, C.D., and **Sperandio, V.** 2007. Development of novel plasmid vectors and a promoter trap system in *Francisella tularensis* compatible with the pFLN10 based plasmids. *Plasmid* 58:159-166. PMID17459476. PMCID PMC2013926.

44) Kendall, M.N., Rasko D.A., and **Sperandio, V.** 2007. Global Effects of the Cell-to-Cell Signaling Molecules Autoinducer-2, Autoinducer-3, and Epinephrine in a luxS Mutant of Enterohemorrhagic *Escherichia coli*. *Infect. Immun*. 75: 4875-4884. PMID17635870. PMCID PMC2044543.

45) Zhu, C., Feng, S., **Sperandio, V.** Yang, Z. Thate, T.E., Kaper, J.B., Boedeker, E.C. 2007. The possible influence of LuxS in the in vivo virulence of rabbit enteropathogenic *Escherichia coli*. *Vet. Microbiol.* 75:4875-84. PMID17643872. PMCID PMC2634748.

46) Sperandio, V. 2007. Novel approaches to bacterial infection therapy by interfering with bacteria-to-bacteria signaling. Future Drugs. 5 (2). PMID17402841. PMCID PMC2613682.

47) Hughes, D.T, and **Sperandio, V**. 2008. Inter-kingdom signaling: communication between bacteria and host. Nature Reviews Microbiology (Invited publication). 6:111-20.PMID18197168. PMCID PMC2667375.

48) Rasko, D.A., Moreira, C.G., Li, D.R., Reading, N.C., Ritchie, J.M., Waldor, M.K., Williams, N. Taussig, R., Wei, S., Roth, M. Hughes, D.T., Huntley, J.F., Fina, M.W., Falck, J.R., **Sperandio, V**. 2008. Targeting QseC signaling and virulence for antibiotic development. *Scienc*e 321: 1078-1080. **[comments on: Nature Chemich Biology, 2008: 4:589; Nature Rev Drugs Discovery 2008, November issue; Microbe November 2008; editorial on New England Journal of Medicine. 2009 360 (1) 83-84].** PMID18719281. PMCID PMC2605406.

49) Rasko, D.A., Rosovitz, M.J., Myers, G.S.A., Mongodin, E.F., Fricke, W.F., Gajer, P., Crabtree, J., Sebaihia, M., Thomson, N.R., Chaudri, R. Henderson, I.R. **Sperandio, V.**, Ravel, J. 2008. The pan-genome structure of *Escherichia coli*: comparative genomic analysis of E. coli commensal and pathogenic isolates. *J. Bacteriol*. 190: 6881-93. PMID18676672. PMCID PMC2566221.

50) Vazquez-Juarez, R.C., Kuriakose, J.A., Rasko, D.A., Ritchie, J.M., Kendall, M.M., Slater, T., Sinha, M., Luxon, B.A., Popov, V., Waldor, M.K., **Sperandio, V.**, and Torres, A.G. 2008. CadA negatively regulates *Escherichia coli* O157:H7 adherence and intestinal colonization. *Infec. Immun*. 76: 5072-81.PMID18794292. PMCID PMC2573373.

51) Parker, C.T., and **Sperandio, V.** 2009. Cell-to-cell signaling during pathogenesis. Cellular Microbiology. (Invited publication) 11(3):363-9. PMID19068097. PMCID PMC2786497.

52) Pacheco, A.R., and **Sperandio, V.** 2009. Inter-kingdom signaling: chemical language between bacterial and host. (Invited publication). Current Opinion in Microbiology (2):192-8. PMID19318290. PMCID PMC4852728.

53) Njoroge, J., and Sperandio, V. 2009. Jamming Bacterial Communication: New Approaches for the Treatment of Infectious Diseases. EMBO Molecular Medicine (Invited publication) 1:201-210.. PMID20049722. PMCID PMC2801573.

54) Sperandio, V. 2009. Deciphering bacterial language. Nature Chemical Biology. 5(12) 870. PMID19915530.

55) Reading, N.C., Rasko, R.A., Torres, A.T., and **Sperandio, V.** 2009. The two-component system QseEF and the membrane protein QseG link adrenergic and stress sensing to bacterial pathogenesis. *PNAS* 106(14):5889-94. PMID19289831. PMCID PMC2667056.

56) Edrington, T.S., Farrow, R.L., **Sperandio, V.** Hughes, D.T., Lawrence, T.E., Callaway, T.R., Anderson, R.C., Nisbet, D.J. 2009. Acyl-homoserine-lactone autoinducer in the gastrointestinal tract of feedlot cattle and correlation to season, E. coli 0157:H7 prevalence and diet. Curr. Microbiol. Mar; 58(3):227-32. PMID18982388. PMCID PMC4526234.

57) Lee, J., **Sperandio, V.** Frantz, D.E., Longgood, L., Camilli, A., Phillips, M.A., and Michael, A.J. 2009. An alternative polyamine biosynthetic pathway is prevalent in bacteria and essential for biofilm formation in *Vibrio cholerae. JBC* 284(15):9899-907. PMID19196710. PMCIC PMC2665113.

58) Hughes, D.T., Clarke, M.B., Yamamoto, K., Rasko, D.A.*, and **Sperandio, V***. 2009. The QseC adrenergic signaling cascade in enterohemorrhagic *E. coli* (EHEC). *PLoS Pathogens* 5:e1000553 * co-corresponding authors. PMID19696934. PMCID PMC2726761.

59) Reading, N.C., Rasko, D.A., Torres, A.G., and **Sperandio, V.** 2010. A transcriptome study of the QseEF two-component system and the QseG membrane protein in enterohemorrhagic *E. coli* O157:H7. Microbiology. 156:1167-1175. PMID20056703. PMCID PMC2889445.

60) Rasko, D.A., and **Sperandio, V.** 2010. Anti-virulence strategies to combat bacteria-mediated disease. Nature Reviews Drug Discovery (Invited publication). 9:117-128. PMID20081869.

61) Sperandio, V. 2010. SdiA bridges chemical signaling between *Salmonella* Typhimurium and *Yersinia enterocolitica* in mice. *J. Bacteriol.* 192: 21-22. PMID19880607. PMCID PMC2798243.

62) Moreira, C.G., Weinshenker, D. and **Sperandio, V.** 2010. QseC mediates *Salmonella enterica* serovar Typhimurium virulence *in vitro* and *in vivo*. *Infect. Immun*. 78:914-26. PMID20028809. PMCID. PMC2825943.

63) Kendall, M.M., Rasko, D.A., and **Sperandio, V.** 2010. The LysR-Type Regulator QseA Plays an Extensive Role in Enterohemorrhagic *Escherichia coli* Virulence Gene Regulation. *Mol. Microbiol*. 76(5):1306-21. PMID20444105. PMCID PMC2936457.

64) Hughes, D.T., Terekhova, D.A., Liou, L., Hovde, C.J., Sahl, J. , Patankar, A.V., Gonzalez, J.E., Edrington, T.S., Rasko, D.A., and **Sperandio, V.** 2010. Chemical sensing in mammalian host-bacterial commensal associations. *PNAS* 2107:9831-6. PMID20457895. PMCID PMC2906910.

65) Calderon, V.E., Chang, Q. McDermott, M. Lytle, M.B., McKee, G., Rodriguez, K., Rasko, D.A., **Sperandio, V.**, Torres, A.G. 2010. Outbreak caused by cad-negative Shiga toxin-producing Escherichia coli O111, Oklahoma. Foodborne Pathog. Dis. 7:107-9. PMID19785536

66) Habdas, B.J., Smart, J. Kaper, J.B, and **Sperandio, V.**. 2010. The LysR-type Transcriptional Regulator QseD Alters Type Three Secretion in Enterohemorrhagic *Escherichia coli* and Motility in K-12 *Escherichia coli*. *J. Bacteriol.* 192:3699-712. PMID20494990. PMCID PMC2897335.

67) Pace, F., Nakazato, G., Pacheco, A., Paiva, J.B., **Sperandio, V.**[*], Silveira, W.D.*. 2010. The Type VI Secretion System contributes to pathogenesis of an Avian Pathogenic *Escherichia coli* (APEC) strain. *Infect. Immun*. 78(12):4990-8. *co-corresponding authorship.PMID20855516. PMCID PMC2981326.

68) Sperandio, V. 2010. SdiA sensing of acyl-homoserine lactones by enterohemorrhagic *E. coli* (EHEC) serotype O157:H7 in the bovine rumen.Gut Microbes. 1: 432-435 (invited publication). PMID21468228. PMCID PMC3056111.

69) Curtis, M.M., and **Sperandio V.** 2011. A Complex Relationship: the Interaction among Symbiotic Microbes, Invading Pathogens, and their Mammalian Host. *Mucosal Immunity*. 4: 133-138 (invited publication). PMID21248724. PMCID. PMC3079440.

70) Pace, F, Paive, J.B., Nakazato, G., Lancellotti, M., Sircili, M.P., Silveira, W.D.*, **Sperandio, V.**[*]. 2011. Characterization of IcmF of the type VI secretion system alters pathogenicity in an avian

pathogenic *Escherichia coli* (APEC) strain. Microbiology 157:2954-62. *co-corresponding authorship. PMID21778203. PMCID PMC3353391.

71) Rocha, S.P.D., Abe, C.M., **Sperandio, V**., Bando, S.Y., Elias, W.P. 2011. Analysis of the Locus of Enterocyte Effacement (LEE) of Atypical Enteropathogenic *Escherichia coli* Displaying Different Patterns of Interaction with Cultured Epithelial Cells. *Infect. Immun*. 79: 1833-1841. PMID21343354. PMCID PMC3088124.

72) Kendall, M.K., Gruber, C.C., Rasko, D.A., Hughes, D.T., and **Sperandio V**. 2011. Hfq Virulence Regulation in Enterohemorrhagic *Escherichia coli* O157:H7 Strain 86-24. *J. Bacteriol*. 193:6843-6851. PMID21984790. PMCID PMC3232842.

73) Njoroge, J.W., Nguyen, Y., Curtiss, M., Moreira, C.G., and **Sperandio V.** 2012. Virulence Meets Metabolism: Cra and KdpE Gene Regulation in Enterohemorrhagic *Escherichia coli* (EHEC). *mBio* 3(5): e00280-12. **Selected by editor's choice in mBio. One of the most cited papers in mBio (December 2018 list).** PMID23073764. PMCID PMC3482499.

74) Njoroge J.W., and **Sperandio V.** 2012 Enterohemorrhagic Escherichia coli (EHEC) virulence regulation by the two bacterial adrenergic kinases QseC and QseE. *Infect. Immun*. 80:688-703. PMID22144490. PMCID PMC3264324.

75) Kendall, M.K., Gruber, C.C., Parker, C. and **Sperandio, V.** 2012. Ethanolamine controls expression of genes encoding for inter-kingdom signaling and virulence in enterohemoarrhagic *E. coli* O157:H7. *mBio* 15:3 pii: e00050-12. **Selected by editor's choice and highlighted in mBio. One of the most cited papers in mBio (December 2018 list).** PMID22589288. PMCID PMC3372972.

76) Pacheco, A.R., Curtis, M.M., Ritchie, J.M., Munera, D., Waldor, M.K., Moreira, C.G., and **Sperandio, V.** 2012. Fucose sensing regulates bacterial intestinal colonization. *Nature* 492:113-117. **[Recommended by Faculty of 1000**. **Commentary on Current Biology 23 (3):R108-110].** PMID23160491. PMCID PMC3518558.

77) Pacheco, A.R. and **Sperandio, V.** 2012. Shiga Toxin in Enterohemorrhagic *E.coli*: regulation and novel antivirulence strategies. *Frontiers of Microbiology* 2:81. PMID22919672. PMCID PMC3417539.

78) Moreira, C.G., and **Sperandio, V.** 2012. Interplay between the QseC and QseE bacterial adrenergic sensor kinases in *Salmonella enterica* serovar Typhimurium pathogenesis. *Infection and Immunity*. 12:4344-53. PMID23027532. PMCID PMC3497441.

79) Moreira, C.G. Herrera,C.M. Needham, B., Parker, C.T., Libby, S.J., Fang, F.C., Trent, M.S.* and **Sperandio, V.*** 2013 Virulence and stress-related periplasmic protein (VisP) in bacterial/host associations. * co-corresponding authors. *PNAS* 110(4):1470-5. PMID23302685. PMCID PMC3557018.

80) Sperandio, V. 2012. Virulence or competition? The search for food and a colonization niche! *Science* 336:1238-1239. PMID22582015.

81) Nguyen, Y., and **Sperandio, V**. 2012. Enterohemorrhagic *E. coli* (EHEC) pathogenesis. *Frontiers of Microbiology* 2:90. PMID22919681. PMCID PMC3417627.

82) Njoroge, J.W., Gruber, C. and **Sperandio, V.** 2013. The interacting Cra and KdpE regulators are involved in the expression of multiple virulence factors in enterohemorrhagic *E. coli* (EHEC). *J. Bacteriol*. 195:2499-508. PMID23524613. PMCID PMC3676075.

83) Chun Chen, Carla A. Blumentritt, Meredith M. Curtis, **Vanessa Sperandio**, Alfredo G. Torres, and Edward G. Dudley. 2013. Restrictive streptomycin-resistant mutations decrease the formation of attaching and effacing lesions in *Escherichia coli* O157:H7 strains. *Antimicrobial Agents and Chemotheraty.* 57:4260-66. PMID23796920. PMCID PMC37544346.

84) Sheng, H., Nguyen, Y., Hovde, C.J.* and **Sperandio, V**.*2013. SdiA aids colonization by enterohemorrhagic *E. coli* (EHEC) of cattle in both forage or grain diets. * co-corresponding authors. *Infect. Immun.* 81:3472-8. PMID23836826. PMCID PMC3754220.

85) Nguyen, Y. Sheng, H., Hovde, C.J. and **Sperandio, V**. 2013. The AHL-synthease YenI from *Yersinia enterocolytica* modulates virulence gene expression in enterohemorrhagic *E. coli* (EHEC). *Infect. Immun*. 81(11):4192-9. PMID23980115. PMCID PMC3811827.

86) Nguyen, Y. and **Sperandio V**. 2013. Signaling between bacteria and their hosts. *Microbe* March 2013. **Seleted for scientific profile.**

87) Gruber, C.C. and **Sperandio, V**. 2014. Post-transcriptional Control of Microbial-Induced Rearrangement of Host Cell Actin. *mBio*. 14;5(1). pii: e01025-13
[Featured by ASM press. "Little but lethal: small RNAs coordinate bacterial attack on epithelial cells" January 14th 2014. Eureka science news. Bionews Texas.] PMID24425733. PMCID PMC3903284.

88) Curtis, M.M., Hu, Z., Klimko, C., Narayanan, S., Deberardinis, R. and **Sperandio, V**. 2014. The gut commensal *Bacteroides thetaiotaomicron* exacerbates enteric infection through modification of the metabolic landscape. *Cell Host and Microbe* 16:759-769.
[commentary in CHM 16:703-705. Featured in Science Newsline and Science Daily. Highlighted on ASM Microbe magazine February 2015] PMID25498343. PMCID PMC4269104.

89) Glover, M., Moreira, C.G., **Sperandio, V**., Zimmern, P. 2014. Recurrent urinary tract infections in healthy and nonpregnant women. Urol Sci. 25(1):1-8. PMCID:PMC4973860

90) Hernandez-Doria, J.D. and **Sperandio, V.** 2013. Nutrient and chemical sensing by intestinal pathogens. *Microbes and Infection* 15(12):759-64. PMID23850657. PMCID PMC3803155.

91) Y Nguyen[†], Nam X. Nguyen[4†], Jamie L. Rogers, Jun Liao, John B. MacMillan, Youxing Jiang[*], and **Vanessa Sperandio**[*]. 2015. Structural and mechanistic roles of novel chemical ligands on the SdiA quorum-sensing transcription regulator. *mBio* 6:e02429-14. *Co-corresponding authors, [†]Co-first authors. PMID25827420. PMCID PMC4453555.

92) Meredith M. Curtis[†], Regan Russell[†], Cristiano Moreira[†], Adeniyi M. Adebesin, Changguang Wang, Noelle S. Williams, Ron Taussig, Don Stewart, Philippe Zimmern, Biao Lu, Ravi N. Prasad, Chen Zhu, David A. Rasko, Jason F. Huntley, John. R. Falck, **Vanessa Sperandio**[*]. 2014. QseC inhibitors as an anti-virulence approach for Gram-negative pathogens. *mBio* 11;5(6). pii: e02165-14. [†]Co-first authors.
[**Selected by editor's choice in mBio; One of the most read mBio papers in March 2015; comments**

in Nature Reviews Microbiology 13, 2 (2015) Ddoi:10.1038/nrmicro3407] PMID25389178. PMCID PMC4235214.

93) de Paiva, J.B., Leite, J.L., Silve, L.P., Rojas, T.C., de Pace, F., Conceicao, R.A., **Sperandio, V.**, and Silveira, W.D. 2015. Influence of the major nitrite transporter NirC on the virulence of a swollen head syndrome avian pathogenic E. coli (APEC) strain. *Vet Microbiol*. 175(1):123-31. PMID25487442

94) Gruber, C.C. and **Sperandio, V.** 2015. Global analysis of post-transcriptional regulation by GlmY and GlmZ in enterohemorrhagic *E. coli* (EHEC) O157:H7. *Infect. Immun*. 83:1286-1295. PMID25605763. PMCID PMC4363437.PMID

95) Gandee L, Hsieh JT, **Sperandio V**, Moreira CG, Lai CH, Zimmern PE. 2015. The efficacy of immediate versus delayed antibiotic administration on bacterial growth and biofilm production of selected strains of uropathogenic *Escherichia coli* and *Pseudomonas aeruginosa*. *Int Braz J Urol*. 41(1):67-77. PMID25928511. PMCID PMC4752058.

96) Sperandio V. 2015. Bacterial Reductionism: Host Thiols Enhance Virulence. *Cell Host and Microbe* 18(1):7-8. PMID26159714. PMCID PMC5072125.

97) Cameron, E. and **Sperandio V.** 2015. Frenemies: Signaling and nutritional integration in pathogen-microbiota-host interactions. *Cell Host and Microbe*. 18(3):275-84 (Invited review). PMID26355214. PMCID PMC4567707. PMID26355214. PMCID PMC4567707.

98) Kendal M.M. and **Sperandio V.** 2016. What a dinner party! Mechanisms and functions of inter-kingdom signaling in host-pathogen associations. *mBio* 1;7(2). pii: e01748-15. **[most read mBio article April 2016].** PMID26933054. PMCID PMC4810492.

99) de Paiva JB, da Silva LP, Casas MR, Conceição RA, Nakazato G, de Pace F, **Sperandio V**, da Silveira WD. 2016. In vivo influence of in vitro up-regulated genes in the virulence of an APEC strain associated with swollen head syndrome. *Avian Pathol*. 45(1):94-105. PMID26926136.

100) Moreira, C.G.*, Russell, R*, Mishra, A.*, Narayanan, S., Ritchie, J., Waldor, M.K., Curtis, M.M. , Winter, E.S., Weinshenker, D., and **Sperandio V.** 2016. Bacterial adrenergic sensors regulate virulence of enteric pathogens in the gut. *mBio*. Volume 7 Issue 3 e00826-16. *Co-First authors. PMID27273829. PMCID PMC4959670.

101) Baumler A.J. and **Sperandio V**. 2016. Microbiota-bacterial pathogen interactions in the gut. 2016. Nature. 535: 85-93.PMID27383983. PMCID PMC5114849.

102) Parker, C.T., Russell, R., Njoroge, J.W., Jimenez, A.G., Taussig, R. and **Sperandio, V**.2017. Genetic and mechanistic analyses of the periplasmic domain of the enterohemorrhagic *E. coli* (EHEC) QseC histidine sensor kinase. *J. Bacteriol*. 199:e00861-16. PMID28138098. PMCID PMC5370426.

103) Carlson-Banning, K.M. and **Sperandio V.** 2016. Catabolite and Oxygen Regulation of Enterohemorrhagic *E. coli* Virulence. *mBio* Nov 22;7(6). pii: e01852-16. PMID27879335. PMIC PMC5120142

104) Sperandio, V. 2017. Take Your Pick: Vitamins and Microbiota Facilitate Pathogen Clearance. *Cell Host and Microbe*. 21(2):130-131. PMID 28182946.

105) Yamamoto D, Hernandes RT, Liberatore AM, Abe CM, Souza RB, Romão FT, **Sperandio V**, Koh IH, Gomes TA. 2017. Escherichia albertii, a novel human enteropathogen, colonizes rat enterocytes and translocates to extra-intestinal sites. *PLoS One* 12(2):e0171385. PMID28178312. PMCID PMC5298312.

106) Pifer, R.* Russell, R* Kumar, A., Curtis, M.M., and **Sperandio, V**. 2018. Redox, amino acid and fatty acid metabolism intersect with bacterial virulence in the gut. PNAS. 115(45):E10712-E10719* Co-first authors. PMCID:PMC6233112.

107) Carlson-Banning K.M., and **Sperandio V.** 2018. Enterohemorrhagic *Escherichia coli* outwits hosts through sensing small molecules. *Curr. Microbiol*. 41: 83-88. PMID 29258058 PMCID PMC5862742

108) Lustri B.C., **Sperandio V**, Moreira C.G. 2017. Bacterial chat: intestinal metabolites and signals in host-microbiota-pathogen interactions. *Infect. Immun*. 85(12). pii: e00476-17. PMID 28947641. PMCID PMC5695128.

109) Cameron E.A, Gruber C.C., Ritchie J.M., Waldor M.K., and **Sperandio V**. 2018. The QseG lipoprotein impacts the virulence of enterohemorrhagic *E. coli* and *Citrobacter rodentium* and regulates flagellar phase variation in *Salmonella enterica* serovar Typhimurium. *Infect. Immun*. 86(4). pii: e00936-17. PMID29358334 PMCID PMC5865047

110) Romão F., Hernandes R., Ooka, T., Hayashi T., **Sperandio V.**, and Gomes T. 2018. Complete Genome Sequence of *Escherichia albertii* Strain 1551-2, a Potential Extra and Intracellular Pathogen Genome Announcement. 1; 6(9) PMID29496827 PMCID PMC5834326

111) Hernandez-Doria, J.D. and **Sperandio, V.** 2018. Bacteriophage transcription factor Cro regulates virulence gene expression in enterohemorrhagic *E. coli*. Cell Host Microbe. 9;23(5):607-617. PMID: 29746832 PMCID PMC5982111. **[Highlighted in Nature Reviews Microbiology]**

112) Cameron, E.A.,* Curtis,M.M*, Kumar, A., Dunny, G.M., and **Sperandio,V**. 2018. Microbiota and pathogen-proteases modulate Type III Secretion activity in intestinal pathogens. mBio 9 (6): e02204-18. * co-first authors. PMCID:PMC6282197. **[Highlited by a commentary in mBio]**

113) Sperandio, V. 2018. Pathogen's adaptation to the human host. PNAS 115(38):9342-9343. PMID: 30190426 PMCID: PMC6156631.

114) Kumar, A. and **Sperandio, V.** 2019. Indole signaling at the interface of microbiota, pathogen and the host. mBio. 10 (3) e01031-19. PMCID: PMC6550529

115) Kumar, A., Ellermann, M. and **Sperandio, V.** 2019. Taming the beast: Interplay between gut small molecules and enteric pathogens. IAI 87(9): e00131-19. PMCID: PMC6704596

116) Cameron, E.A., **Sperandio, V.**, Dunny, G.M. 2019. *Enterococcus faecalis* enhances expression and activity of the enterohemorrhagic *E. coli* type III secretion system. *mBio* 10 (6) e02547-19. PMCID: PMC6867897

117) Jimenez, A.G., Ellermann, M., Abott, W. and **Sperandio, V.** 2020. Diet-derived galacturonic-acid regulates virulence and intestinal colonization in enterohemorrhagic *E. coli* and *Citrobacter rodentium*. *Nature Microbiology* (5): 368–378. PMCID: PMC6992478

118) Kumar, A.*, Russell, R. *, Pifer, R., Menezes-Garcia, Z., Cuesta , S., Narayanan, S., MacMillan, J., and **Sperandio, V.** 2020. The serotonin neurotransmitter modulates virulence of enteric pathogens. *Cell Host & Microbe.* 28: 1-13. *Co-first authors.

119) Kim, C.S., Gatsios, A., Cuesta, S., Lam, Y.C., Wei, Z., Chen, H., Russell, R.M., Shine, E.E., Wang, R., Wyche, T.P., Piizi, G., Flavell, R.A., Palm, N.W., **Sperandio, V.**, Crawford, J.M. 2020. Characterization of autoinducer-3structure and biosynthesis in *E. coli*. *ACS Central Science*. 6(2):197-206. PMCID: PMC7047286

120) Menezes-Garcia, Z. Kumar, A., Zhu, W. Winter, S.E., and **Sperandio, V**. 2020. L-Arginine sensing regulates virulence gene expression and disease progression in enteric pathogens. *PNAS.* 117(22):12387-12393.

121) Martins, F.H., Kumar, A. Abe, C.M., Carvalho, E., Nishiyama-Jr, M., Xing, C., **Sperandio, V.***, Elias, W.P.*. 2020. EspFu-mediated actin assembly enhances epithelial colonization by enteropathogenic *Escherichia coli* and triggers inflammatory signaling pathways. *co-corresponding authors. *MBio* 11(2). pii: e00617-20. PMCID: PMC7157822

122) Ellermann, M., Pacheco, A.R., Jimenez, A.G., Russell, R.M., Kumar, A., Zhu, W., Vale, G., Martin, S.A., McDonald, J.G., Winter, S.E., and **Sperandio, V.** 2020. Endocannabinoids inhibit induction of virulence in enteric pathogens. *Cell* under revision

Book chapters:

1) Kaper, J.B., Elliott, S.J., **Sperandio, V**., Perna, N.T., Mayhew, G.F., and Blattner, F.R. Attaching and effacing intestinal histopathology and the locus of enterocyte effacement. Pages:163-182. *in* Kaper, J.B. and O'Brien, A.D. (editors) *Escherichia coli* O157:H7 and other Shiga-toxin producing *E. coli* strains. 1998. ASM Press, Washington, D.C.

2) Sperandio, V. Vibrio. *in* Trabulsi, L.R., Altherthum, F., Gompertz, O.F. and Candeias, J.A.N. (editors). 1999. Microbiologia. 3rd edition. Livraria Ateneu. Sao Paulo, Brazil.

3) Clarke, M.B., and **Sperandio, V.** 2006. LuxS dependent regulation of *E. coli* virulence. In Demuth, D.R., and Lamont, R. (editors) Bacterial cell-to-cell communication role in virulence and pathogenesis. Cambridge University Press, Cambridge, U.K. New York.

4) Rasko, D.A., and **Sperandio, V.** 2009. Novel Approaches to Bacterial Infection Therapy by Interfering with Cell-to-Cell Signaling. Current Protocols in Microbiology. Wylow and Sons. NJ. Feb;Chapter 17:Unit17.3.

5) Moreira, C.G., and **Sperandio, V.** 2010. The epinephrine/norepinephrine/autoinducer-3 inter-kingdom signaling system in Escherichia coli O157:H7. In Lyte, M, and Freemont P. (editors) Microbial endocrinology. Springer, New York.

6) Kendall, M., and **Sperandio, V.** 2014. Quorum Sensing in *E. coli* and *Salmonella. E. coli* and *Salmonella* book, ASM Press. Published online January.

7) Gruber, C, and **Sperandio, V.** 2013. Regulation in Response to Host-derived Signaling Molecules. In Vasil, M.J. and Darwin, A.J. Regulation of Bacterial Virulence. ASM Press. Washington DC . Chapter 27 545-565.

8) Pifer, R. and **Sperandio V.** 2014. The interplay between the microbiota and EHEC. In Sperandio, V. and Hovde, C.J. Enterohemorrhagic *Escherichia coli*. Second edition. ASM press. Washington DC .

9) Sperandio V. 2014. The Way Forward. In Sperandio, V. and Hovde, C.J. Enterohemorrhagic *Escherichia coli.* Second edition. ASM press. Washington DC .

10) Njoroge, J.W. and **Sperandio, V**. 2013. Interference with bacterial cell-to-cell chemical signaling in development of new anti-infectives. In Gualerzi, C.O., Brandi, L., Fabbretti, A., and Pon, C.L. Antibiotics, Targets, Maechanisms, and Resistance. Wiley-VCH. Weinheim, Germany. Chapter 10 241-261.

11) Pacheco, A.R., and **Sperandio V.** 2015. Enteric Pathogens Exploit the Microbiota-generated Nutritional Environment of the gut. In Conway, T. and Cohen, P.S. Metabolism and Bacterial Pathogenesis. ASM press. Washington DC .

12) Jimenez, A.G. and **Sperandio V.** 2019. Quorum sensing and the gut microbiome. *In* Tommonnaro, G. Quorum Sensing: molecular mechanism and biotechnological application. Academic Press. Elsevier

Journal Issues:

Sperandio, V. and Freitag. N. 2012. Cell Regulation issue. Current Opinion in Microbiology. Volume 15 issue 2.

Books:

Sperandio, V. and Hovde, C.J. 2014. Enterohemorrhagic and Shiga toxin producing *Escherichia coli.* Second edition. ASM press. Washington DC.

Patents:

Patent entitled "Methods and compositions related to modulation of bacterial colonization" UTSD:960USP1 filed March 10th, 2004

Patent entitled "Methods of Inhibiting bacterial virulence and compounds relating thereto" UTSD:1854USP1 filed October 23rd, 2007. Granted

Patent entitled: "Methods for modulating bacterial virulence and related compounds. UTSD: 2639. Filed 2013

Speaker:

-Cell Symposia. Infection Biology in the Age of the Microbiome. Paris, France. December 2020

-University of Tennessee. Knoxsville. September 2020
-Tufts Medical School. Boston MA. December 2019
-University of Maryland School of Medicine. Baltimore MD. September 2019
-NATO sponsored Science for Peace and Security. Cetraro, Italy. September 2019
-University of Chicago. Chicago IL. October 2019
-University of Pennsylvania. Philadelphia PA. November 2019
-John Hopkins University. Baltimore MD. February 2019
-Seminar at Duke. NC. October 2019
-Cold Spring Harbor Molecular pathogenesis and host response meeting. September 2019, Cold Spring Harbor NY
-GRC Microbial adhesion and Signal Transduction. Rhode Island. July 2019
-University of Virginia. May 2019
-Microbiology Society Meeting. Belfast Ireland. April 2019
-University of Minnesota. Minneapolis MN. April 2019
-Seminar Amlan, Chicago IL. December 2018
-Poultry Science Association Latin American Conference. November 2018. Sao Paulo, Brazil.
-University of North Carolina. Chapel Hill. NC. October 2018.
-University of Washington. Seattle WA. July 2018.
-Georgetown University. Washington DC. September 2018.
-Chair plenary session Bowels to Behavior: the Gut-Brain Axis. ASM Microbe meeting. Atlanta. June 2018
-Chair session Cellular and molecular microbiology of STEC. VTEC 2018. Florence Italy. May 2018
-University of Arizona. Tucson. February 2018.
-International Conference on Microbiota and Health. Shanghai China. March 2018.
-Soc. exp. biol. med. (FASEB) meeting. San Diego CA. April 2018
-University of Washington. Seattle WA. July 2018.
-GRC Microbial Toxins and Pathogenesis. Waterville Resort. July 2018.
-GRC Sensory Transduction in Microorganisms. Ventura CA. January 2018.
-UK Microbiology Society annual conference. Birmingham UK. April 2018.
-SciBr Summitt. Boston MA. December 2017.
-Harvard University. Boston MA. October 2017.
-University of Illinois at Chicago. Chicago. November 2017.
-University of Florida. Gainsville FL. September 2017.
- Brazilian Microbiology congress. Foz do Iguacu, Brazil. October 2017.
-Brazilian Biochemistry Congress. July 2017.
-5th Congress of Biochemistry and Molecular Biology of Bacteria. Mexico. October 2017.
-Penn State University. March 2017.
-University of North Dakota. January 2017.
-FASEB meeting on Microbial Pathogenesis: Mechanisms of Infectious Diseases. Snowmass Village, Colorado. July 2017.
-FASEB Gastrointestinal Tract XVII:Current Biology of the GI Tract, the Microbiota, and Beyond. Steamboat Springs, Colorado. July 2017.
-Gordon Conference on Catecholamines. Sunday River resort in Newry, ME. August 2017
-Wake Forest University. December 2016
-University of Louisville College of Medicine. December 2016
-National University of Singapore. Singapore. September 2016.
-Michigan State. Lansing MI. April 2016
-Nature Café: The role of the microbiota in health and disease. Tokyo. Japan. October 2016

-Oklahoma State University. February 2016.
-Molecular Genetics of Bacteria and Phage Meeting. Madison Wiscosin. August 2016
-ASM Microbe. Convener and speaker. June 2016
-University of Dundee. Young microbiologists symposyum on microbe signaling, organization and pathogenesis. Dundee Scotland. June 2016
- University of Wurzburg. Wurzburg Germany. April 2016
-FDA. June 2016
-ASM Biodefense meeting. Arlington VA. February 2016
-Stanford University. Stanford CA. February 2016 (student invited speaker)
-Medical School Microbiology and Immunology Chairs meeting. Guatemala. January 2016
-Medical College of Wiscosin. December 2015
-Mucosal Immunology and Biology Research Center at Massachusetts General Hospital. November 2015
-Brazilian Society of Microbiology meeting. Florianopolis, Brazil. October 2015
-State University of Araraquara. Araraquara, Brazil. October 2015
-Lecture in the Advanced Bacterial Genetics course at Cold Spring Harbor. June 2015
-Hendrix College. March 2015 (student invited speaker)
-Hope conference Sweeden. May 2015.
-Washington State University. April 2015. Pullman WA
-Wellcome trust conference in microbiome. June 2015. Cambridge. UK
-UC Irvine. Irvine CA. February 2015 (student invited speaker)
-Society of General Microbiology meeting. Birmingham UK. March 2015
-ASM general meeting (Eli-Lilly award lecture) 2015. New Orleans. May 2015
-Colloquium by the Laboratory of Excellence ECOFECT. Lyon France. December 2014
-Latin American Microbiology meeting LACER symposium. Cartagena, Colombia. November 2014
-University of Texas Health Science Center at Tyler. October 2014
-Seminar University of Toledo. September 2014
-Joint meeting of Chemical Signals in Vertebrates and the International Society of Chemical Ecology. Urbana Champaign IL. June 2014
-Symposium from the Belgian Society for Microbiology on “Cell signaling in host-microbe interactions”. Brussels, Belgium. November 2014
-Argentine Society for Research in Biochemistry and Molecular Biology meeting. Rosario, Argentina. November 2014
-University of Miami Medical School. Miami FL April 2014
- Annual meeting of the American Meat Science Association. Wisconsin. June 2014
-DDW Chicago May 2014
-Chair of a session on The Microbial Toxins and Pathogenesis. Waterville Resort. July 2014
-Microbiology & Infectious Diseases Congress. London UK. September 2014
-Imperial College. London UK. October 2014
-Federal University of Rio Grande do Sul. Brazil. March 2014.
-UTSA San Antonio. January 2014
-Chair of a session on ASM General meeting. Boston 2014
-Speaker on ASM General meeting. Boston 2014
-Gordon Conference on new antibacterial discovery. March. Ventura CA. 2014
-Seminar at Oregon State University. January 2014
-Seminar University of Ohklahoma Health Science center. February 2014
-US Kavli Frontiers of Science. Irvine CA. November 2013
-Seminar University of Rochester Medical Center. November 2013
-Seminar Washington university. October 2013

-Seminar Kansas State University. October 2013
-Seminar at UT HSC. San Antonio TX. October 2013
-ASM Eastern Pennsylvania Branch meeting. Philadephia. September 2013
-Inaugural Texas Fresh AIR symposium. Austin TX. September 2013
-Brazilian Society of Microbiology meeting. September 2013. Natal Brazil
-The Neidhardt-Freter symposium. University of Michigan. October 2013
-Cold Spring Harbor Molecular pathogenesis and host response meeting. September 2013
-Pediatrics seminar series 2013
-Sendai Japan, March 2013
-University of Iowa, October 2012, Iowa. (Invited by the students)
- University of North Texas, October 2012, Fort Worth
- UT Southwestern Obesity seminar Series 2012
-University of Turku, Finland, November 2012
- Brazilian society of Genetics Congress. Brazil September 2012
-REGEM Microbial Genetics. Brazil. September 2012
-Chair pre-symposium of type three secretion effectors of the VTEC 2012 meeting. Amsterdam May 2012
-Chair genetics and virulence session VTEC 2012 meeting Amsterdam. May 2012
-Baylor. Houston. April 2012
-Forum of Microbial Threats, Board on global health, Institute of Medicine, the National Academies. Worskshop "Social Biology of Microbial Communities" Washington DC. March 2012
-TNO Beneficial Microbes Conference. Netherlands. March 2012
-ASM Biodefense meeting. Washington, March 2012
-ASM General Meeting. San Francisco, June 2012
-Workshop from the Institute of Microbiology and Infectious diseases "Bacterial evasion to anti-infectives: from gene to public health. France. January 2012.
-2nd Lorne Infection and Immunity Conference. Australia. February 2012.
-IECA Conference. Mexico. December 2011
-ASM Conference in Cell-to-cell communication in bacteria. Miami FL. November 2011
-Cell Signaling Networks Merida 2011 Conference. Mexico. October 2011
-Congress of Zoonozes. Buenos Aires. Argentina. June 2011
- UNC. Chapel Hill. September 2011
-GI Division Grand Rounds UT Southwestern Medical Center. September 2011
-Microbial pathogenesis conference. Dublin, Ireland. September 2011.
-Symposium "Antimicrobial drug discovery: a new challenge for the future" Turin. Italy. June. 2011
-FASEB Conference "Probiotics, Intestinal Microbiota and the Host: Physiological and Clinical Implications. Carefree Resort Arizona. July 2011
-University of Virginia. Charllotsville VA. May 2011
-Symposium of Dimensions of Microbiology. The National Academies of Science division on Earth and Life Studies. Washignton DC. April 2011.
-NYU. New York city. April 2011
-Rockefeller University. New York city. March 2011
-Berkeley. Berkeley CA. March 2011
-UMASS. September 2010
-Neogen. September 2010
-Annual Meeting of the U.S. Animal Health Association (USAHA). Minneapolis. November 2010
-ISME13 conference. Seattle. August 2010
-University of British Columbia. Vancouver Canada. July 2010 (Invited by the students)

-University of Maryland Medical School. August 2010
-Harvard Medical School. October 2010
-Northwestern University. November 2010
-Stanford University. October 2010
-UT Austin. May 2010
-University Lecture Series UT Southwestern Medical Center. Dallas, September 2010
-McMaster University, Canada, June 2010
-University of Pennsilvania, Philadelphia. April 2010.
-Wellcome Trust's Frontiers Meetings programme meeting "Applying new technologies to the epidemiology, prediction, and control of antibiotic resistance in developing countries". Stellenbosch, South Africa. February 2010.
-Department of Microbiology and Immunology seminar series Emory. March 2010
-DSTL Salisbury UK March 2010
-Society for General Microbiology meeting. Edimburgh Scotland. March 2010
-ESF/FEMS-sponsored BacNet/10 Research Conference, San Feliu, Spain. September 2010
-Sensory Transduction in Microorganisms (STIM) Gordon Research Conference. California, January 2010.
-Symposium on Microbes to Metazoans: regulation, dynamics and evolution of social behavior. Georgia Institute of Technology. December 2009
-New England Regional Center for Excelence (NERCE/BEID) Retreat. November 2009
-Microbiology retreat UT Houston. March 2009.
-UT Arlington. Dept of Biology seminar series. October 2009
-UT Southwestern Obesity seminar Series. August 2009
-UT Southwestern Pharmacology seminar Series. September 2009
-Symposium on enteric microbiota (organized by Danone) in the 3rd Joint meeting on neurogastroenterology, Chiago, August 2009.
-Tularemia conference. Germany, Berlin September 2009.
-Conference from FEMS on "From Microbial Pathogenesis to the discovery of anti-virulence drugs". Switzerland. October 2009.
-Conference on the "Ecology of pathogenic Escherichia coli". Oslo, Norway. March 2009
-Brazilian Microbiology Meeting. Porto de Galinhas, Brazil, November 2009.
-ASM Conference on Biofilms. Cancun, Mexico, November 2009.
-Texas Human Nutrition Conference. What's bugging you and why does it matter. Texas A&M. College Station, TX, February 2009.
-Health Canada and McMaster University, Canada. February 2009.
-**7**th International Symposium on Shiga-toxin (verotoxin) producing *E. coli*. 2009. Buenos Aires. Argentina. May 2009.
-State University of Campinas. Brazil. May 2009
-109th General Meeting of the American Society of Microbiology. Philadelphia, May 2009
-International Symposium "Metabolism Meets Virulence". April 2009. Schloss Hohenkammer. Germany
-EHRLICH II, 2nd World conference on Magic Bullets. October 2008, Nurenberg. Germany
-University of Tenesee, October 2008 (Invited by the students)
-Karolinska Institute, Stockholm, Sweeden. April 2008 (Invited by the students)
-ASM Biodefense Meeting. February 2008, Baltimore MD.
- UT Southwestern Medical Center. Biochemistry seminar series. January 2008.
-UT Southwestern Medical Center. Molecular Biology seminar series. January 2008.
-National Academy of Sciences 19th annual Kavli Frontiers of Science symposium. November 2007, Irvine, CA.

-UT Houston. December 2007
-Yale University. September 2007
-Brazilian Microbiology meeting. Brasilia, DF, Brazil. October 2007
-State University of Sao Paulo. Brazil. September 2007
-Butanta Institute. Brazil. September 2007
-FASEB meeting on Microbial Pathogenesis: Mechanisms of Infectious Diseases. Snowmass Village, Colorado. July 2007.
-6th Cold Spring Harbor Molecular pathogenesis and host response meeting. September 2007.
-University of Washington, February 2007 (Invited by the students)
-107th General Meeting of the American Society of Microbiology. Toronto, Canada, May 2007.
-UMASS, Boston, MA, March 2007
-Vanderbilt University, May 2007
-Emory, Atlanta, December 2006
-UT Austin. Austin, TX. September 2006
-Burroughs Wellcome Fund meeting. Vancouver. Canada. August 2006.
-Texas ASM Branch meeting. Galveston, TX. November 2006.
-6th International Symposium on Shiga-toxin (verotoxin) producing *E. coli.* 2006. Melbourne. Australia. November 2006.
-EPEC symposium. Melbourne. Australia. November 2006.
-106th General Meeting of the American Society of Microbiology. Orlando, FL, May 2006.
-University of Pennsylvania. April 2006.
-Symposium of the American Gastroenterology Association. Marina Del Rey, CA, March 2006.
-Baylor Medical School. January 2006.
-ASM Texas Branch Meeting, Denton, TX. November 2005.
-ASM Conference on Biology of Beneficial Microbial Symbionts in Animals. Lake Tahoe, Nevada, 2005.
-Texas A &M, College Station, TX, November, 2004.
-The Awaji International Forum on Infection and Immunity. Japan, August, 2004.
-International Association for Food Protection Meeting, USDA, Phoenix, Arizona, August, 2004.
-University of Maryland College Park, College Park, Maryland, May, 2004.
-University of Oklahoma, March, 2004. (Invited by the students)
-Digestive Disease Week. American Association of Gastroenterology. New Orleans, Louisiana, May, 2004.
-Texas A &M, College Station, TX, October, 2003.
-University of Texas Medical Branch, Galveston, TX, September, 2003.
-5th International Symposium on Shiga-toxin (verotoxin) producing *E. coli*, Edimburgh, Scotland, June, 2003.
-Louisiana State University Medical Center, Shreveport, Louisina, October, 2002
-Third International Symposium in Enteropathogenic *E. coli.* Puerto Valharta, Mexico, October 2002.
-University of Dallas, Dallas, Texas, March 2002.
-Brazilian Microbiology Meeting, Foz do Iguacu, PR, Brazil, October, 2001.
-1st ASM Conference on Cell-Cell Communication in Bacteria. Snowbird, Utah, July, 2001.
-101th General Meeting of the American Society of Microbiology. Orlando, FL, May 2001.
-Reed College. Portland, Oregon, September, 2000
-Microbial toxins and pathogenicity Gordon Conference. Proctor Academy, NH, July, 2000.
-US-Japan Meeting. Baltimore, MD, December, 1999
-Brazilian Microbiology meeting, Salvador, BA, Brazil, October, 1999
-Emerging and Reemerging infectious diseases symposia. Champain-Urban, IL, May, 1999.

-Chesapeake bay meeting (CAMP), Bethesda, MD, 1999.
-Chesapeake bay meeting (CAMP), Baltimore, MD, 1998