

CURRICULUM VITAE

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EDUCATION:

1973-1977 B.S. Zoology Colorado State University, Ft.Collins,CO.
1981-1985 Ph.D. Immunology Duke University Medical Center, Durham,N.C.

RESEARCH AND PROFESSIONAL EXPERIENCE:

1996-1998 **Postdoctoral Research Assistant**
University Marine Biological Station, Millport, Scotland and Institute of Physiological Botany, Uppsala University, Uppsala, Sweden

1988-91 **Postdoctoral Research Assistant**
Institute Pasteur, Unit of Mycology, Paris, France

1989-1991 **Consultant**
Cassenne Laboratories, Paris, France

1991-92 **Visiting Scientist**
University of Pierre and Marie Curie, Unit of Biophysical Membranes, Paris, France

1992-94 **Postdoctoral Research Assistant**
Georgetown University Medical Center, Department of Microbiology, Washington D.C.

PROFESSIONAL APPOINTMENTS:

1994-2001 **Assistant Professor on the Research Track**
Georgetown University Medical Center, Department of Microbiology, Washington D.C.

2001 –2002 **Associate Professor on the Research Track**
Georgetown University Medical Center, Department of Microbiology, Washington D.C.

2002- **Assistant Professor**
LSUHSC, School of Medicine, Department of MIPS, New Orleans, LA

2002- **Assistant Professor, joint appointment**
LSUHSC School of Dentistry, Department of Periodontics, New Orleans, LA

MEMBERSHIPS in PROFESSIONAL ORGANIZATIONS

American Society of Microbiology
American Society of Genetics
Medical Mycology Society of Americas
British Medical Mycology Society

AWARDS:

1999: Mycology Millenium Prize (\$5000) awarded by ISHAM

TEACHING EXPERIENCE:

- 2003-present:** Assistant Course Director Microbiology and Immunology (Dental School)
Advance Topics in Immunology (MIP graduate course)
Microbiology (Dental Hygiene students)
Research Methodologies (dental postgraduate students)
Techniques (MIP graduate course)
- 2000 -2002:** Lecturer in Medical Microbiology Course for second year medical students
- 1993-2002:** Lecturer in graduate courses (inc. Medical Mycology, Bacterial Pathogenesis, Biotechnology and Survey Courses)
- 1992-2002:** Laboratory Instructor in Medical Microbiology Lab for second year medical students.
- 1986-1989:** Demonstrator/ Lecturer/ Coordinator: Marine Microbiology Field Course, UMBS

CURRENT PH.D. GRADUATE STUDENTS:

Bethany Peel, M.S.
Michelle Kelly, M.S.

GRADUATE STUDENTS TRAINED:

Stacy Plum 2002 Ph.D. Microbiology, Georgetown University Medical School

UNDERGRADUATE THESIS STUDENTS

Thomas Rozwadolski 2001 B.S. Biology, Georgetown University
David Cognetti 1998 B.S. Biology, Georgetown University

THESIS & DISSERTATION COMMITTEES:

Jennifer Cameron. 2003 - ? Ph.D. committee MIP, LSUHSC
Yoo Jin Kim, Ph.D. 2002 Microbiology, Georgetown University Medical School

POST-DOCTORAL OR POST-RESIDENCY FELLOWS TRAINED:

Glen Palmer, Ph.D. 2001- Postdoctoral fellow
T. Brian Bozeman 2003 Endodontic DDS

EXTRAMURAL FUNDING:

Funded (present)

1999 - 2004 NIH RO1 P.I. Signaling complexes and the 14-3-3 protein in *Candida*.

Funded (last 3 years)

2000 – 2001 NIH SBIR P.I. The Elf1 protein as a novel antifungal target.
2000- 2002 NIH RO1 Co-P.I. New Approaches to Target Specific Antifungals
P.I. Dr. Ronald Cihlar, GUMC
2001- 2002 NIH RO1 Co-P.I. AIDS- related Candidiasis: In vivo gene expression.
P.I. Dr. Ronald Cihlar, GUMC

Funding Pending

2004-2006 NIH R21 P.I. Vacuole expansion during filamentation in *Candida*

RESEARCH REVIEW COMMITTEE:

2002 – present: Member of Aids and Related Research 4 (AAR4) Study Section, NIH

- 2001 – 2002: Ad hoc reviewer for AAR4 Study Section, NIH
2000 - 2002: Ad hoc reviewer for miscellaneous grants: Drug contract NIH, Veteran's board, HRB- Ireland
1999 – 2002: Ad hoc reviewer for several journals including Microbiology, Medical Mycology, BBRC, JIC, Anitmicrob Agents, Eukaryotic Cell, Infection & Immunity, Nucleic Acid Research (~20 articles/yr)

JOURNAL PUBLICATIONS

Refereed:

- Palmer, G.E, Johnson, K.J., Ghosh, S and **Sturtevant, J.** 2003. Mutant alleles of the essential 14-3-3 gene in *Candida albicans* demonstrate varying defects in growth and filamentation. Submitted to *Microbiology*, Nov 2003.
- Palmer, G., Cashmore, A. and **J. Sturtevant.** 2003. Germtube formation in *Candida albicans* is dependent on vacuole function. *Eukaryotic Cell*, 2:411-421.
- Sturtevant, J.** 2002. Elongation factors: are they rational antifungal targets? Emerging Therapeutic Targets. Expert Opinion on Therapeutic Targets,6:545-553.(review)
- Cognetti, D., Davis, D., and **J. Sturtevant.** 2002. The *Candida albicans* 14-3-3 gene, *BMH1*, is essential for growth. *Yeast*, 19:55-67.
- Sturtevant, J.E.** 2000. Differential display reverse transcriptase PCR (DDRT-PCR): Its application to molecular pathogenesis and medical mycology. *Clinical Reviews in Microbiology* 13:408-427.(review)
- Sturtevant, J.** , F. Dixon, Wadsworth, E., J.-P. Latgé, X-J. Zhao, and R. Calderone. 1999. Identification and cloning of *GCA1*, a gene which encodes a cell wall glucoamylase from *Candida albicans*. *Med Myc.* 37:357-366.
- Sturtevant, J.E.**, Cihlar, R.L., and R.A. Calderone. 1998. Disruption studies of a *Candida albicans* gene, *ELF1*, A member of the ATP binding cassette family. *Microbiol.* 144: 2311-2321.
- Sturtevant, J.**, and R. Calderone. 1997. *Candida albicans* adhesins: Biochemical aspects and virulence. *Revista Iberoamericana Micologia.* 14:90-97. (review)
- DeBernardis, F., A. Cassone, **J. Sturtevant,** & R. Calderone. 1995. Expression of secreted aspartyl proteinases SAP-1 and SAP-2 in experimental vaginitis caused by *Candida albicans*. *Infect Immun.* 63:1887-1892.
- Sturtevant, J.E.** & J-P. Latgé. 1992. Interactions between the conidia of *Aspergillus fumigatus* and human complement component C3. *Infect Immun*, 60:1913-1918.
- Sturtevant, J.E.** & J-P. Latgé. 1992. Participation of complement in the phagocytosis of the conidia of *Aspergillus fumigatus* by human PMN. *J Infect Dis*, 166:580-586.
- Sturtevant, J.E.**, O. Seksek, & J. Bolard. 1992. Intracellular pH and morphological transition in *Candida albicans*: Laser microspectrofluorometry studies on isolated cells. *J Med Mycol*, 1:208-211.
- Aspan, A., **J.E. Sturtevant,** V.J. Smith, & K. Söderhäll. 1990. Purification and characterization of the prophenoloxidase activating enzyme from crayfish red blood cells. *Insect Biochem*,20:709-718.
- Sturtevant, J.E.** & A.E. Balber. 1987. *Trypanosoma lewisi*: Restriction of alternative complement pathway C3/C5 convertase activity. *Exp Parasitol*, 63:260-271.
- Balber, A. E. & **J.E. Sturtevant.** 1986. A surface glycoprotein of *Trypanosoma lewisi* binds immunoglobulin G from the sera of uninfected rats. *Infect Immun*, 53:420-426.
- Sturtevant, J.E.** & A.E. Balber. 1986. Flow cytometric analysis of immunoglobulin and complement component C3 on the surface of *Trypanosoma lewisi*. *J. Protozool*, 33: 197-203.
- Sturtevant, J.E.** & A.E. Balber. 1984. Binding of complement component C3 to the surface of intact and protease-treated *Trypanosoma lewisi* correlated with sensitivity to alternate complement pathway mediated lysis. *Infect Immun*, 42:869-879.

Walker, S.M., **J.E. Sturtevant** & W.O. Weigle. 1981. Serum-mediated suppression of non-specific B cell activation. II. Relative resistance of B cells from NZB mouse strain to regulation by a natural inhibitor in normal mouse serum. *J. Immunol*, 127:1204-1207.

Walker, S.M., **J.E. Sturtevant** & W.O. Weigle. 1981. Serum-mediated suppression of non-specific B cell activation. I. Description of an inhibitory capacity in normal mouse serum and characterization of the inhibitory component. *J. Immunol*, 126:1852-1856.

Non-refereed:

Mühlschlegel, F., W. Fonzi, L.Hoyer, T. Payne, F.M. Poulet, J. Clevenger, J.-P. Latgé, A. Beauvais, S. Paris, M. Monod, **J. Sturtevant**, M. Ghannoum, Y. Nozawa, and R. Calderone. 1998. Molecular mechanisms of virulence in fungus-host interactions. *J Med Vet Mycol*. 36S1: 238-248.

Sturtevant, J.E., A.M. Delort, O. Seksek, & J. Bolard.1992. Intracellular pH and morphological transition in *Candida albicans*: Laser microspectrofluorometry studies

Sturtevant, J.E. 1989. Étude immunohistochimique des effets du sulconazole sur la réponse cellulaire aux infections dermatophytiques cutanéés. *Annales Derm Ven*. 116 (supp 1): 16-23.on isolated cells in Proc 4th Symposium Topics in Mycology: Fungal Dimorphism, Cambridge. Plenum Press.

BOOKS & CHAPTERS

Sturtevant, J. & Cihlar, R.L. 2002. Strategies for the Study of Gene Expression in Fungi. *In The Mycota Vol XII: Human Fungal Pathogens*, J.E. Dömer & G.S. Kobayashi, eds. Springer-Verlag, Heidelberg Germany.

Calderone, R.A., Enache, E., Eskandari, T. Wadsworth,E. & **Sturtevant, J.** 1997. Adherence of *Candida albicans* to mammalian cells in vitro: Nutritional influences. *in Fungal Cells in Biodefense Mechanism*, S.Suzuki & M. Suzuki,eds. Saikon Publishing, Tokyo. p 73-83.

Calderone, R.A. & **J.E. Sturtevant**. 1994. Macrophage interactions with *Candida*. *in Macrophage Pathogen Interactions*, B.S. Zwillig & T.K. Eisenstein, eds. Marcel Dekker, Inc. p505-515.

Sturtevant, J.E. & J-P. Latgé. 1991. Complement and phagocytosis in *Aspergillus*. *in Fungal Cell Wall and Immune Response*, J-P. Latgé & D. Boucias, eds. Springer Verlag. p341-364.

Sturtevant, J.E. 1985. Glycoproteins, antigens and regulation of complement activation on the surface of the protozoan parasite *Trypanosoma lewisi*: implications for immune evasion. Thesis. Duke University, N.C., USA.

ABSTRACTS AND INVITED PAPERS

Abstracts:

T.B. Bozeman*, R. Lemon, B.G. Jeansonne, **J. Sturtevant**. 2004 A Model for Studying Core Leakage of Mineral Trioxide Aggregate (MTA). Endodontics

G.E. Palmer and **J. Sturtevant** 2004. Identifying functional domains in the *Candida albicans* 14-3-3 protein, Bmh1p. Gordon Conferences. Ventura, CA Feb 2004.

G.E. Palmer **J. Sturtevant**. 2003. Identifying functional domains in the *Candida albicans* 14-3-3 protein, Bmh1p. 2003 Human Fungal Pathogens, EURESCO. Sep 2003, Giens, France.

G.E. Palmer & **J. Sturtevant** 2003. Identifying functional domains in the *Candida albicans* 14-3-3 protein, Bmh1p. 15th Congress of ISHAM, San Antonio Texas.

G. E. Palmer, **J. Sturtevant**, A. M. Cashmore 2002. The *Candida albicans* vacuole: more than just a trash can. British Soc Med Mycol. Aberdeen SCOTLAND.

G. E. Palmer, A.M. Cashmore, **J. Sturtevant** . 2002. Functional analysis of the vacuole in *Candida albicans*. *Candida and Candidiasis*. Tampa FLA

Sturtevant, J. 2001. The 14-3-3 protein (Bmh1p1) is essential for growth in *Candida albicans*..2001 Human Fungal Pathogens, EURESCO. Sep 2001, Seefeld Austria.

- Rozwadowski, T & **J. Sturtevant**. 2001. Elf1p, a potential antifungal target. 101st Gen Mtg Amer Soc Microbiol, Orlando, FLA.
- Johnson, K., Davis, D. & **J. Sturtevant**. 2001. The *Candida albicans* 14-3-3 gene (BMH1) is essential for growth. 101st Gen Mtg Amer Soc Microbiol, Orlando, FLA.
- Sturtevant, J.** 2000. Role of the 14-3-3 protein (bmh1p) in *Candida albicans*. 2000 Yeast Genetics and Mol Biol Mtg, Seattle, WA.
- Sturtevant, J.** 1999. The role of the 14-3-3 protein in *Candida albicans*. 99th Gen Mtg Amer Soc Microbiol, Chicago, ILL.
- Sturtevant, J.** 1999. The role of the 14-3-3 protein in *Candida albicans*. *Candida and candidiasis: Biology, Pathogenesis, and Management*. ASM Congresses, March 1999.
- Cognetti, D. & **J. Sturtevant**. 1998. Identification of a 14-3-3 gene (*CaBMH*) in *Candida albicans*. 98th Gen Mtg Amer Soc Microbiol, Atlanta, GA.
- Dixon, F.M., Calderone, R.A. & **J. Sturtevant**. 1998. Isolation of a putative glucoamylase gene (*GAM1*) from the human pathogen *Candida albicans*. 98th Gen Mtg Amer Soc Microbiol. Atlanta, GA.
- Wadsworth, E., **J. Sturtevant**, and R. Calderone. 1997. Galactose effects on the adherence and expression of cell wall mannoproteins of *Candida albicans*. 13th Congress of International Society of Human and Animal Mycology. Parma ITALY.
- Wadsworth, E., **J. Sturtevant**, and R. Calderone. 1997. Galactose effects on adherence of *Candida albicans*. American Soc Microbiology, Miami, FLA.
- Sturtevant, J.** and R. Calderone. 1996. Characterization of a *Candida albicans* knock-out mutant lacking *HEF3*, a member of the ABC transporter gene family. Cellular and Molecular Mycology, Gordon Conference, June 1996.
- Sturtevant, J.** 1996. Differential gene expression in *Candida albicans* following recognition of host cells. *Candida and candidiasis: Biology, Pathogenesis, and Management*. ASM Congresses, March 1996.
- Eskandari, T., **J. Sturtevant**, E. Enache, E. Wadsworth, and R. Calderone. 1996. *Candida albicans* adherence to a human esophageal cell line. *Candida and candidiasis: Biology, Pathogenesis, and Management*. ASM Congresses, March 1996.
- Sturtevant, J.E.**, and R.A. Calderone. 1995. Further characterization of a *Candida albicans* gene, *CAABC*: Gene disruption studies. 95th Amer Soc Microbiol, p 93.
- DeBernardis, F., A. Cassone, **J. Sturtevant**, and R. Calderone. 1995. Expression of two aspartyl proteinase genes in experimental *Candida* vaginitis. 95th Amer Soc Microbiol, p 99.
- Sturtevant, J.** & R. Calderone. 1994. Molecular characterization of a *Candida albicans* gene (*CAABC*) which shows homology with members of the ATP binding cassette (ABC) protein superfamily. 5th Intl Mycological Congresses, Vancouver, British Columbia, p 212.
- Sturtevant, J.E.** & J-P. Latgé. 1991. Complement component C3 and *Aspergillus fumigatus*. *Les Adhesins Fongiques*, Societé Francaise de Microbiologie, p26. Paris, FRANCE.
- Sturtevant, J.E.** & J-P. Latgé. 1990. Interactions between *Aspergillus fumigatus* and human polymorphonuclear cells. *The FASEB Journal*, 3:3198. New Orleans, LA.
- Aspan, A., K. Söderhäll, & **J.E. Sturtevant**. 1986. Activation of prophenoloxidase from crustacean haemocytes. *Dev Comp Immuno*, 10:624. West Berlin, GERMANY
- Sturtevant, J.E.**, S. Mann, & A.E. Balber. 1985. *Trypanosoma lewisi*: All surface immunoglobulin may not be specific antibody. *Fed Proc*, 44:983.
- Sturtevant, J.E.** & A.E. Balber. 1984. Binding of complement component C3 to the surface of intact and protease-treated *Trypanosoma lewisi*. *Fed Proc*, 43:1769.

Invited papers:

Palmer, G.E* & **Sturtevant J.** 2003. Random mutagenesis of the essential *Candida albicans* gene *BMH1* generates non-lethal alleles. 15th Congress of ISHAM, San Antonio TX.

- Palmer, G.E* & **Sturtevant J.** 2003. Random mutagenesis of the essential *Candida albicans* gene *BMH1* generates non-lethal alleles. British Yeast Group Mtg. Leicester, England.
- Sturtevant J.** 2002. Bmh1p, an essential signaling module protein in *Candida albicans*. British Soc Med Mycol. Aberdeen SCOTLAND.
- Sturtevant J.** 2002. Bmh1p, an essential signaling module protein in *Candida albicans*. *Candida* and Candidiasis. Tampa FLA.
- Sturtevant J.** 2001. The *Candida albicans* 14-3-3 protein is essential for growth . British Soc Med Mycol, London, ENGLAND.
- Sturtevant J.** 2000. Role of the 14-3-3 protein in *Candida albicans*. ISHAM, ARGENTINA. May 2000 (could not attend)
- Sturtevant J.** 1999. The dwarfing of *Candida albicans* by *ELF* and others: Targeting targets. Aberdeen, SCOTLAND.
- Sturtevant J.** 1999. Elf1p, a potential antifungal target? British Society of Med Mycol, Dublin, IRELAND.
- Sturtevant J.** & R. Calderone 1997. Differential gene expression in *Candida albicans* following its recognition of host cells and host cell ligands. 13th Congress of International Society of Human and Animal Mycology. Parma ITALY.
- Sturtevant J.** & R. Calderone 1997. Gene disruption of an ABC transporter, *ELF*, in *Candida albicans*. American Soc Microbiology, Miami, FLA.
- Sturtevant J.** 1996. Differential gene expression in *Candida albicans* following recognition of host cells and host cell ligands. Cellular and Molecular Mycology, Gordon Conference.
- Sturtevant J.** & R. Calderone 1995. Recognition of host cells by *Candida albicans*. International Symposium: Differentiation and Behavior in Fungal Models. Irapuato, MEXICO.
- Sturtevant J.** & J.P. Latge. 1994. Complement Interactions in *Aspergillus fumigatus* and *Candida albicans*. 7th International Congress of Bacteriology and Applied Microbiology: Mycology Division; IUMS Congresses '94. Prague, CZECH REPUBLIC.
- Sturtevant J.** , Seksek, O. & Bolard, J. 1992. Intracellular pH and morphological transition in *Candida albicans*: Laser microspectrofluorometry studies on isolated cells. French Society of Medical Mycology, Tours, FRANCE.
- Sturtevant J.** 1991. Complement and *Aspergillus fumigatus*. Annual Department of Bacteriology and Mycology Meeting, Institute Pasteur, Paris, FRANCE.
- Sturtevant J.** 1990. Complement and phagocytosis in *Aspergillus*. NATO Wokshop: Fungal Cell Wall and Immune Response, Elounda, Crete, GREECE.
- Sturtevant J.** 1989. Interactions between *Aspergillus* conidia and human polymorphonuclear cells. Medical Mycology Conference, Tour Hospital, Geneva, SWITZERLAND.
- Sturtevant J.** 1989. The effects of sulcanozole on the local immune response to dermatophytes: immunohistochemical studies. Annual Dermatology Meeting: Cassenne Symposium: Towards a new approach of topical antimycotics. Paris, FRANCE

LSUHSC COMMITTEES:

2003	COE Faculty Recruitment Committee	COE
2003 -	Center Department Seminar Coordinator	COE
2003-	Oral Biology Masters Committee	School of Dentistry
2003 -	Faculty Development Committee	School of Dentistry
2003 -	MIP Website Committee	MIP department
2003-	Graduate student qualifying committee	MIP department
2003	Focus group-LSUHSC Space Committee (subcommittee of LSUHSC Research Council)	LSUHSC
2002 -	Dentistry Research Council Committee	COE/ School of Dentistry

2002 - Dental Student Research Committee School of Dentistry

WORKSHOPS:

2002 Molecular Mycology, Woods Hole, MA