



The University of Georgia

College of Agricultural and Environmental Sciences
Animal and Dairy Science Department

BIOGRAPHICAL DATA

STEPHEN CLARK NICKERSON

<http://www.ads.uga.edu/profiles/Nickerson.htm>

DATE OF BIRTH: March 14, 1950

PLACE OF BIRTH: Melrose, Massachusetts

HOME TOWN: Stoneham, Massachusetts

PRESENT BUSINESS ADDRESS: Animal and Dairy Science Department
Rhodes Center
University of Georgia
Athens, GA 30602
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FAMILY: Married to the former Patricia Ann St.
Peter
Three children - Brent Ashley (1971), Joshua
Andrew (1979), and Sarah Elizabeth (1981)

EDUCATION:

1968	Graduated from Stoneham High School, Stoneham, MA 02180
1972	B.S. in Animal and Veterinary Sciences (with distinction), University of Maine, Orono, ME 04076
1976	M.S. in Dairy Science Virginia Polytechnic Institute & State University, Blacksburg, VA 24061
Thesis:	<i>"Cytological effects of hormones and plasma on mammary tissue in vitro"</i>
1980	Ph.D. in Dairy Science Virginia Polytechnic Institute & State University, Blacksburg, VA 24061
Dissertation:	<i>"Histological and cytological response of the bovine mammary gland to experimental S. aureus infection."</i>

EMPLOYMENT:

- 2004-Present Professor and Department Head, Animal and Dairy Science Department
University of Georgia, Athens, GA 30602.
- 2001-2004 a) Professor and Head of the Department of Dairy Science Department at Vir-
ginia Polytechnic Institute and State University, Blacksburg, VA 24060-
0315.
b) Director of the Two-Year Agricultural Technology Program, 2003-
2004.
- 1990-2001 Professor and Director of the Mastitis Research Laboratory,
Hill Farm Research Station, Homer, LA 71040.
- Responsible for coordinating and supervising the research and day to day activi-
ties of from six to eight employees, including, undergraduate interns, M.S. and
Ph.D. students, a secretary/word processor operator, research associates, techni-
cians, an instructor, a postdoctoral associate, and one assistant/associate profes-
sor.
- 1997-1998 Interim Resident Director of the Hill Farm Research Station, Homer, LA 71040
- 1985-1990 Associate Professor and Director of the Mastitis Research Laboratory,
Hill Farm Research Station, Homer, LA 71040
- 1981-1985 Assistant Professor, Lactation Physiology
Hill Farm Research Station, Homer, LA 71040
- 1980-1981 Postdoctoral Research Physiologist
United States Department of Agriculture
Beltsville, MD 20705
- 1979-1980 Postdoctoral Research Associate
Department of Animal Science
Purdue University
West Lafayette, IN 47907
- 1976-1979 Graduate Research Assistant
Department of Dairy Science
Virginia Polytechnic Institute & State University
Blacksburg, VA 24061
- 1975-1976 Research Technician
Department of Dairy Science
Virginia Polytechnic Institute & State University
Blacksburg, VA 24061
- 1973-1975 Graduate Research Assistant, Department of Dairy Science
Virginia Polytechnic Institute & State University, Blacksburg, VA 24061

MEMBERSHIP IN PROFESSIONAL SOCIETIES (National and State):

American Association for the Advancement of Science, 1984-present.
American Dairy Science Association, 1973-present.
American Registry of Professional Animal Scientists, 1995.
American Society of Animal Scientists, 2003-present.
Clarke – Oconee Cattlemen's Association, 2004-present.
Georgia Cattlemen's Association, 2004-present.
Georgia Milk Producers Association, 2004-present.
Georgia Pork Producers Association, 2004-present.
Gordon Research Conference, 1975-present.
Louisiana Dairy Fieldman's Association, 1981-2000.
Louisiana Farm Bureau Federation, 1985-2001.
Louisiana Society for Electron Microscopy, 1982-2001.
Mastitis Research Workers Conference, 1979-present.
National Association of County Agricultural Agents.
National Mastitis Council, 1982-present.
NE-112 Regional Cooperative Research Project, 1979-present.
Southern United Dairy Industry Association (SUDIA), 2001-present.
Virginia State Dairymen's Association, 2001-2004.

ACTIVITIES IN PROFESSIONAL ORGANIZATIONS:

Agri-Practice (Large Animal Practice) Editorial Board, 1992-present.

American Dairy Science Association, 1973-present; Charter Member.
Milk Synthesis Committee, 1983-86; Vice-Chairman, 1985; Chairman, 1986.
Animal Health Committee, 1989-1992.
Drugs, Chemicals, and Additives Committee, 1991-present; Chairman, 1995.
Representative to the National Mastitis Council, Chairman, 1986-87, 1987-88.
Journal of Dairy Science Editorial Board, 1987-1993.
Selection Committee for the West Agro, Inc. Award, 1987-1990; Chairman, 1990.
Selection Committee for the Agway, Inc. Young Scientist Award, 1988-1991;
Chairman, 1991.
Nominating Committee for the Production Division, 1992; 2003; 2004.
Journal of Dairy Science Associate Editor for Physiology and Management, 1995-2000.
Journal of Dairy Science Senior Editor for Physiology and Management, 1996-2000.
Dean Foods Award Selection Committee, 1999-2000.
Journal of Dairy Science, Editor-in-Chief, 2002-2004.
Journal Management Committee, 2002-2004.
Board of Directors, 2002-2004.
Fellow Award Committee, 2002-2005.

Louisiana Dairy Fieldman's Association, 1981-2001; Board of Directors, 1987-1989.

National Mastitis Council, 1982-present.

ACTIVITIES IN PROFESSIONAL ORGANIZATIONS: (National Mastitis Council: Continued)

Research Committee, 1982-present.
 Subcommittee to standardize studies on bovine growth hormone and its effect on mastitis, 1987.
 Subcommittee for the development of efficacy testing protocols for predipping and postdipping products, 1990.
 Somatic Cell Committee, 1983-1989.
 Participant in Technology Transfer Session, 1983-present.
 Program Chairman, Technology Transfer Session, 1985.
 Board of Directors, 1986-1992.
 Nominating Committee, 1990.
 Subcommittee for revising the National Mastitis Council slide set and video, 1989-1991.
 Program Committee, Annual Meeting, 1991.
 Chairman of the Subcommittee of the Research Committee for the revision of Concepts of Bovine Mastitis, 1994-1995.
 Subcommittee for revising the manual: Laboratory and Field Handbook on Bovine Mastitis, 1996.
 Teat Dip Committee, 1998-present. Chairman, 2000.
 Second Vice-President of NMC, 2000.
 Short Course Chairman, 2000.
 First Vice-President of NMC and Annual Meeting Program Chair, 2001.
 Teat Dip Bibliography Committee, 2001-2004.
 Research Committee, 2001-2004.
 President of NMC, 2002.
 Teat Dip Bibliography Subcommittee, 2000-2003.
 Teat Dip Protocol Subcommittee, 2002-2003.

Mastitis Research Workers Conference, 1982-present, Chairman, 1984.

NE-112 Regional Cooperative Research Project, 1982-present.
 Secretary, 1985; Vice-chairman, 1986; Chairman, 1987.
 Chairman of writing committee for revising the five-year Project Outline, 1987.

Served as an ad hoc reviewer for: Cell and Tissue Research, Infection and Immunity, Journal of Dairy Research, Scanning Electron Microscopy, and Veterinary Medicine, and for grant proposals for the Bi-National Association for Research Development, USDA Competitive Grants Program, Small Business Innovative Research Program, and Maine Technology Institute.

Good Laboratory Practices (GLPs) in the Public Research Environment. Southern Association of Agricultural Experiment Stations. Atlanta, GA.

AC-2 monitor for the Southern Extension-Research Activities Information Exchange Group dairy (SERA-IEG-15)

Southern United Dairy Industry Association (SUDIA)
Associate Director (2002).
Scientific Advisory Board (2003-present).
Media communications/interview skills training, Winston-Salem, NC, 2003.

COMMUNITY/CIVIC ACTIVITIES:

Homer Jaycees, 1981-1985, Homer, LA.
Claiborne Academy Booster Club, 1991-2001.
H. S. Ford Museum Board of Directors, 1991-present; Chairman, 1998-2000.
Saint Margaret Catholic Church, 1981-2001; Organist and Choir Member, 1990-1997; President of Mens Club, 1997-2001; Eucharistic Minister, 1997-2001; Community Life Coordinator, 1998-2001; Lector, 1997-2001.
Homer Lions Club, 1998. 3rd Vice-President, 1999, 2nd Vice-President, 2000.
Homer Trailblazers Equestrian Club, 1992.
Homer Public School Parent Support Group, 1984-1990.
Pearisburg Lions Club, Director, 2002-2004; 3rd Vice-President.
Holy Family Catholic Church, Pearisburg, VA 2001-2004, Eucharistic Minister, Lector, Paris Council Member. St. Joseph Catholic Church, Athens, GA. 2004-present.

HONOR SOCIETIES:

Phi Kappa Phi
Phi Sigma
Gamma Sigma Delta (Unit Liaison Representative, 1991-1992, 1994-1995, 1997-1998).

POSTDOCTORAL ASSOCIATES SUPERVISED: G. M. Tomita, 1995-1998.

GRADUATE STUDENTS SUPERVISED: Two Ph.D. candidates:
L. M. Sordillo, Ph.D., 1987
P. Trinidad, Ph.D., 1989

One M.S. candidate:
G. H. Quiroga, M.S., 1992

GRADUATE STUDENT COMMITTEES: Committee member: Five students

UNDERGRADUATE INTERNSHIPS SUPERVISED: Five students

SPECIAL RECOGNITIONS AND ACTIVITIES:

- A. Received the American Dairy Science Association Annual Award for outstanding research paper, 1976.

SPECIAL RECOGNITIONS AND ACTIVITIES: (Continued)

- B. Postdoctoral Research Fellowship, Animal Science Department, Purdue University, West Lafayette, IN, 1978-1980.
- C. Postdoctoral Research Fellowship, USDA, Beltsville, MD, 1980-1981.
- D. Recipient of USDA Animal Health Special Research Grants for \$71,000 in 1983-1985, and for \$117,000 in 1989-1991.
- E. Full member, Louisiana State University Graduate Faculty, 1983-present.
- F. Recipient of the 1985 West Agro Chemical Award for outstanding contributions to mastitis abatement.
- G. Invited to present a paper at the International Dairy Federation Seminar on Mastitis Control, Kiel, Federal German Republic, 1985.
- H. Recipient of the First Mississippi Corporation Award of Excellence as the outstanding researcher in the Louisiana Agricultural Experiment Station, 1986.
- I. Recipient of the 1986-1987 LSU Foundation Distinguished Faculty Award.
- J. Served on the Louisiana Agricultural Experiment Station Annual Staff Conference Committee, 1988.
- K. Team Member on the Mini-Review of Research Programs, Louisiana Agricultural Experiment Station, 1988.
- L. Included in the 21st Edition of Who's Who in the South and Southwest, 1988.
- M. Recipient of the Agway Inc. Young Scientist Award in Dairy Production, American Dairy Science Association, 1988.
- N. Recipient of the Gamma Sigma Delta Research Award of Merit, 1988.
- O. Recipient of the 1989 USDA Award for Superior Service.
- P. Included in the 17th Edition of American Men and Women of Science, 1989.
- Q. Served on the USDA - S.B.I.R. Animal Production and Protection Committee, 1990.
- R. Member of the Research Advisory Committee for Goal 1 - Basic Animal Biology, and participated in Goal 1 - Dairy Research for the 21st Century, A Strategic Plan - Louisiana Agricultural Experiment Station, 1990.

SPECIAL RECOGNITIONS AND ACTIVITIES: (Continued)

- S. Appointed to the Implementation Committee for the strategic plan "Focus 2000: Research for the 21st Century", 1991-1993.
- T. Invited to officiate as an "Opponent" for a doctoral candidate's thesis defense in the Department of Obstetrics and Gynecology, The Swedish University of Agricultural Sciences, Uppsala, Sweden, 1992.
- U. Attended training for 1) Good Documentation Practices, 2) Introduction to Writing Standard Operating Procedures, and 3) Overview of the Good Laboratory Practices (GLP) Regulations, in preparation for conforming the Mastitis Research Laboratory, Hill Farm Research Station to GLP regulations.
- V. Appointed to serve an 18-month term as a member of the National Research Council's Subcommittee on Drug Use in Food Animals, 1994-1995.
- W. Selected to participate in Class 4 of the ESCOP/ACOP Leadership Development Course, Indianapolis, IN, 1994.
- X. Selected to serve as an external examiner for a Ph.D. candidate in Veterinary Ethology at the University of Pretoria, South Africa, 1994.
- Y. Satisfactorily completed all required coursework for Introduction to the Good Laboratory Practice (GLP) Standards conducted by ABC Laboratories, Inc./GLP Strategies, Columbia, MO, 1994.
- Z. Serve on the Veterinary Advisory Board of the Agri-Health Corporation, New York, NY, 1995.
- AA. Recipient of the Dean Foods Award, 1999.
- BB. Served as a member of the Exemplary Department Awards Committee, 2002.
- CC. Served as a member of the Encyclopedia of Dairy Sciences Editorial Advisory Board, 2002.
- DD. Served as a member of the ADSA Fellow Award Committee, 2002.
- EE. Served as advisor to the Mastitis Research Network Scientific Committee, Réseau canadien de recherche sur la mammite bovine, Université de Montréal, Québec, Canada, 2002-2004.
- FF. Recipient of the American Dairy Science Association Service Award for serving as Editor-in-Chief, 2002-2005.
- GG. Recipient of American Dairy Science Association Service Award for serving on the ADSA Board of Directors, 2002-2005.

UNIVERSITY ACTIVITIES:

A. University Exemplary Department Awards Committee, VA Tech, 2002-2003.

B. College of Agricultural and Environmental Science Administrative Council Member, UGA, 2004-present.

GRANTS AND DONATIONS RECEIVED AS THE PRINCIPAL INVESTIGATOR:

A.	1983	Babson Bros	\$40,000.00
B.	1983	USDA Animal Health	.71,000.00
C.	1984	Babson Bros	27,000.00
D.	1985	3M Company	20,000.00
E.	1986	Alfa-Laval	.3,000.00
F.	1986	Babson Bros	8,500.00
G.	1987	3M Company	40,000.00
H.	1987	Alfa-Laval	14,000.00
I.	1987	Bristol	20,000.00
J.	1987	Bristol	6,000.00
K.	1987	Immunex	15,000.00
L.	1987	Immunex	20,000.00
M.	1987	Kortum, Inc.	44,000.00
N.	1988	Alfa-Laval	7,000.00
O.	1988	Amgen	14,000.00
P.	1988	Fort Dodge	8,000.00
Q.	1988	Lilly	.73,000.00
R.	1989	Fort Dodge	26,300.00
S.	1989	Independent Buyers Assoc (IBA)	30,000.00
T.	1989	USDA Animal Health	117,000.00
U.	1989	West Agro	25,000.00
V.	1990	3M Company	60,000.00
W.	1990	Upjohn	75,000.00
X.	1990	Lilly	65,000.00
Y.	1991	Alfa-Laval	65,000.00
Z.	1991	West Agro	35,000.00
AA.	1991	A&L Laboratory	30,000.00
BB.	1991	Schering-Plough	29,000.00
CC.	1991	Fort Dodge	5,000.00
DD.	1991	Immunovet	2,500.00
EE.	1991	Upjohn	12,000.00
FF.	1991	Alcide	5,000.00
GG.	1992	Cyanamid	25,000.00
HH.	1992	Babson Bros.	60,000.00
II.	1992	Lilly	94,800.00
JJ.	1992	Fort Dodge	42,000.00
KK.	1992	IBA	4,500.00
LL.	1993	Klenzade	15,000.00

RESEARCH:

- A. Hormonal role in mammary cell differentiation and induction of lactation in dairy cattle.
- B. Drug efficacy studies for treatment of mastitis in both lactating and nonlactating cows.
- C. Histopathologic and ultrastructural aspects of induced *Staphylococcus aureus* mastitis in the bovine.
- D. Microbiological aspects of bovine mastitis and evaluation of commercial identification systems.
- E. Role of extracellular bacterial toxins in mammary inflammation.
- F. Cytoskeletal role in exocytosis of milk constituents from mammary epithelial cells *in vitro*.
- G. Role of microtubules in prolactin-dependent mammary cell differentiation and during involution.
- H. Evaluation of metabolic inhibitors in protein and carbohydrate synthesis and secretion, and amino acid uptake in mammary epithelium.
- I. Development and propagation of monoclonal antibodies to cell-surface components of bovine leukocytes and identification of neutrophil subsets.
- J. Evaluation of the Fossomatic cell counter for enumerating somatic cells in milk.
- K. Effect of colchicine on mammary differentiation and milk production in dairy heifers.
- L. Effects of antibiotics on bovine blood and milk neutrophil viability, phagocytosis, and ultrastructure.
- M. Effects of antibiotic infusion products on milk synthesis and secretion.
- N. Mechanics of leukocyte migration into mammary secretions and effects on alveolar integrity.
- O. Local production of immunoglobulins in the mammary gland with special references to plasma cells in teat end tissues.
- P. Enhancement of mammary immunity via immunostimulation of teat end tissues.

RESEARCH: (Continued)

- Q. Amyloidosis in the bovine mammary gland.
- R. Evaluation of postmilking teat sanitizers in mastitis control.
- S. Histologic and biochemical changes accompanying mammary involution.
- T. Role of myoepithelial cells and ultrastructural aspects of milk ejection.
- U. Effects of machine milking, vacuum level, and fluctuation on teat end morphology and ultrastructure.
- V. Role of *Corynebacterium bovis* in the biological control of mastitis.
- W. Prevalence and pathology of beef cow mastitis.
- X. New treatment strategies for intramammary/intramuscular therapy.
- Y. Prevalence of intramammary infection in breeding age dairy heifers.
- Z. Effects of bovine somatotropin (BST) on incidence of bovine mastitis.

INTERNATIONAL EXPERIENCE:

- A. 1985 - Participated in the International Dairy Federation Seminar on Mastitis Control, Kiel, Federal German Republic.
- B. 1986 - Consulted for the Holstein Association on the Multicooperator Dairy Improvement Program, Venezuela.
- C. 1987 - Consulted for the Holstein Association in the International Technical Program on Mastitis Control, Trinidad and Tobago.
- D. 1987 - Consulted for ALSI Dairy Equipment Company on Milk Quality and Mastitis Control, Argentina.
- E. 1989 - Participated in the International Conference of Mastitis, St. Georgen/Langsee, Corinthia, Austria.
- F. 1989 - Participated in the Fifth International Dairy Conference, Mexico City, Mexico.
- G. 1991 - Consulted for NYS Dairy Equipment Company on Mastitis Control, Iwate, Japan.

INTERNATIONAL EXPERIENCE: (Continued)

- H. 1991 - Participated as a reviewer in the international evaluation of "The Pathogenesis of Bovine Mastitis" for the Nordic Joint Committee for Agriculture and the Swedish Council for Forestry and Agricultural Research.
- I. 1992 - Served as an "Opponent" in the evaluation of a Swedish Ph.D. dissertation titled "Studies on inflammation in the bovine teat with regard to its role in the defense against udder infections". The Swedish University of Agricultural Sciences, Uppsala, Sweden.
- J. 1992 - Participated in the International Conference on Cows' Milk as an invited speaker, Mexico City, Mexico.
- K. 1992 - Participated in the Ontario Veterinary Medical Association Conference as an invited speaker, Hamilton, Ontario.
- L. 1993 - Participated in the Appeal to the Medicines Commission for approval of bovine somatotropin (BST) in Great Britain, London, England.
- M. 1993 - Lectured to bovine practitioners at the Veterinary Institute, Ministry of Agriculture, Tel Aviv, Israel.
- N. 1993 - Lectured to bovine practitioners at the Annual Meeting of the Danish Veterinary Practitioners Association, Askov, Denmark.
- O. 1995 - Consulted for The Uphjohn Company on Mastitis Control, Sao Paulo, Brazil.
- P. 1996 - Lectured to bovine practitioners at the Western Canadian Dairy Seminar, Red Deer, Alberta.
- Q. 1996 - Participated in the 12th Annual Conferencia Internacional Sobre Ganado Lechero, Mexico City, Mexico.
- R. 1997 - Lectured to bovine practitioners and dairy producers at a symposium sponsored by Malinckrodt, Torreon, Mexico.
- S. 1997 - Lectured to bovine practitioners and dairy producers at a symposium sponsored by Italian Veterinary Association, Milano, Italy.
- T. 1998 - Participated in the 2nd International Tropical Symposium, Manati, Puerto Rico.
- U. 1998 - Participated in the Panamerican Congress on Mastitis Control and Milk Quality, Merida, Mexico.
- V. 1998 - Consulted for Schering-Plough on Mastitis Control, Bogota and Medellin, Colombia.
- W. 1998 - Participated in the 1st International Symposium on Milk Quality, Curitiba, Parana, Brazil.

INTERNATIONAL EXPERIENCE: (Continued)

- X. 1999 - Invited speaker at the 2nd Simposio Pfizer Sobre Lecheria. Venado Tuerto, Argentina.
- Y. 1999 - Invited speaker at the 2do Congreso Nacional de Control de Mastitis y Calidad de la Leche, Leon, Guanojuato, Mexico.
- Z. 1999 - Invited speaker at the Milk Quality and Mastitis Seminar, Argentinian Catholic University, Buenos Aires, Argentina.
- AA. 2000 - Invited speaker at the Pacific Congress on Milk Quality and Mastitis Control, Nagano, Japan.
- BB. 2000 - Invited speaker at the 2nd Jornada GAV de Calidad de Leche para Productores. Buenos Aires, Argentina.
- CC. 2000 - Participant in the Symposium on Immunology of Ruminant Mammary Gland. Stresa, Italy.
- DD. 2001 - Invited speaker at the Manitoba Dairy/Forage/Beef Opportunities Conference, Winnipeg, Manitoba, Canada
- EE. 2001 - Invited speaker at Mercolactea 2001. San Francisco, Cordoba, Argentina.
- FF. 2002 - Invited speaker at the Milk Quality and Mastitis Control Seminar, sponsored by Orion, Westfalia-Surge, Maebashi, Kitami, and Hiroshima, Japan.
- GG. 2002 - Keynote speaker at the 2nd PanAmerican Congress on Milk Quality and Mastitis Control, Ribeirao Preto, Brazil.
- HH. 2003 - Invited speaker at the 11th Encuentro National de Ganados Lecheros, Torreon, Mexico.
- II. 2003 - Invited speaker at 2nd Congress on Milk Quality and Mastitis Control, Tokyo Japan.
- JJ. 2004 - Invited speaker at 3rd Jornadas Tecnicas Vacuno de Leche, Talavera de la Reina, Spain.
- KK. 2004 - Invited speaker at the IV Seminario Internacional competitividad en Carne y Leche, Medellin, Colombia.
- LL. 2005 - Participant in the UGA delegation to Zamorano University in Honduras to foster collaboration in Extension and undergraduate programs.

PRIMARY JOURNALS:

1. Journal of Dairy Science, American Dairy Science Association, 1111 North Dunlap Avenue, Savoy, IL 61874.