

## MATERIALS LICENSE

Amendment No. 19

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		
1. Old Dominion University		In accordance with letter dated October 20, 1992
2. 1300 W. 49th Street Norfolk, Virginia 23529-0566		3. License number 45-09599-03  is amended in its entirety to read as follows:
		4. Expiration date June 30, 1995
		5. Docket or Reference No 030-16045
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Any byproduct material with atomic numbers 3 through 83 and with a half-life of not more than 120 days	A. Any	A. Not to exceed 150 millicuries per radionuclide and 5 curies total
B. Cadmium 109	B. Electroplated sources	B. 4 millicuries
C. Calcium 45	C. Any	C. 4 millicuries
D. Carbon 14	D. Any	D. 200 millicuries
E. Cesium 137	E. Sealed sources	E. 165 millicuries
F. Chlorine 36	F. Any	F. 5 millicuries
G. Cobalt 60	G. Sealed sources	G. 10 millicuries
H. Hydrogen 3	H. Any	H. 200 millicuries
I. Hydrogen 3	I. Foils	I. Not to exceed 250 millicuries per foil and 750 millicuries total
J. Nickel 63	J. Foils or plated sources	J. Not to exceed 20 millicuries per source and 500 millicuries total
K. Nickel 63	K. Sealed sources	K. 1 millicurie
L. Plutonium 236	L. Any	L. 5 microcuries

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PDR ADDCK 03016045  
C PDR

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SUPPLEMENTARY SHEET

License number 45-09599-03

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6. Byproduct, source, and/or special nuclear material

7. Chemical and/or physical form

8. Maximum amount that licensee may possess at any one time under this license

M. Plutonium 239

M. Any

M. 5 microcuries

N. Plutonium 239

N. Sealed neutron sources

N. 144 grams total

O. Strontium 90

O. Sealed sources

O. 25.7 millicuries

P. Thorium 229

P. Any

P. 2 microcuries

Q. Thorium 232

Q. Any

Q. 100 microcuries

R. Tin 119m

R. Electrodeposited on foils

R. 4 millicuries

S. Uranium 232

S. Any

S. 1 microcurie

T. Uranium 236

T. Solid

T. 15 microcuries

U. Uranium (natural)

U. Any

U. 100 microcuries

V. Zinc 65

V. Any

V. 10 millicuries

9. Authorized use

A. through X. For research and development as defined in 10 CFR 30.4, including animal studies, training of students, and calibration of instruments.

## CONDITIONS

10. Licensed material shall be used only at Old Dominion University in Norfolk, Virginia except that Hydrogen 3, Carbon 14 and Iodine 125 (as described in application dated October 23, 1989 and letter dated May 31, 1990) may also be used aboard ODU research vessels anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. Licensed material shall be used by, or under the supervision of, individuals designated by the Radiation Safety Committee, George T. Wong, Ph.D., Chairman.
12. The Radiation Protection Officer for this license is Scott Sechrist.

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(cont.)

**CONDITIONS**

- 13.A. (1) Each sealed source acquired from another person and containing licensed material, other than hydrogen 3, with a half-life greater than 30 days and in any form other than gas, shall be tested for contamination and/or leakage before use. In the absence of a certificate from a transferor indicating that a test has been made within 6 months before the transfer, a sealed source received from another person shall not be put into use until tested.
- (2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting materials or 10 microcuries or less of alpha emitting material.
- (3) Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage before any use or transfer to another person unless they have been leak tested within 6 months before the date of use or transfer.
- B. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to use or transfer as a sealed source. If the inspection or test reveals any construction defects or 0.005 microcurie or greater of contamination, the source shall not be used or transferred as a sealed source until it has been repaired, decontaminated and retested.
- C. Each sealed source containing licensed material, other than hydrogen 3, with a half-life greater than 30 days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed 6 months except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed 3 months.
- D. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission. Records may be disposed of following Commission inspection.
- E. If the test required by Subsection A. or C. of this condition reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region II, Division of Radiation Safety and Safeguards, Nuclear Material Safety Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323, describing the equipment involved, the test results, and the corrective action taken.
14. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in Section 20.203(a)(1), of 10 CFR Part 20, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.
15. A. Detector cells containing titanium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 225 degrees Centigrade.
- B. Detector cells containing scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding 325 degrees Centigrade.

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(cont.)

**CONDITIONS**

16. A. Each chromatograph detector containing Nickel 63 shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a detector received from another person shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the surfaces of the device in which the foil is mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the foil from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within five (5) days of the test with the U.S. Nuclear Regulatory Commission, Region II, Division of Radiation Safety and Safeguards, Nuclear Material Safety Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
17. Licensed material shall not be used in or on human beings.
18. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
19. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the design of which the NRC has specifically approved for transport of plutonium by air.
20. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:
- A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.
- B. Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
21. The licensee shall maintain records of information important to safe and effective decommissioning at Old Dominion University, Norfolk, Virginia in accordance with the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.

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(cont.)

## CONDITIONS

22. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of unsealed licensed material to quantities less than  $10^4$  times the applicable limits in Appendix C of 10 CFR 20 pursuant to the provisions of 10 CFR 30.35(d).
23. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application (with attachments) dated October 23, 1989
- B. Letters dated:
- May 31, 1990 (with attachments)
  - June 18, 1990
  - July 2, 1990
  - July 27, 1992
  - October 20, 1992

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

EARL G. WRIGHT

Date

OCT 22 1992

By

*Earl G. Wright*Region II, Nuclear Materials Safety Section  
101 Marietta Street, Suite 2900  
Atlanta, GA 30323

# OLD DOMINION UNIVERSITY

Office of Research and Graduate Studies  
Norfolk, Virginia 23529-0013  
804-683-3460

October 20, 1992



Mr. Earl Wright  
U. S. Nuclear Regulatory Commission  
Region II, Nuclear Materials Safety Section  
101 Marietta Street, Suite 2900  
Atlanta, GA 30323

Re: Materials License - 45 - 09599-03

Dear Mr. Wright:

As we discussed by phone, I am hereby notifying you that Mr. LaMarr Beuchler has left his position as Radiation Safety Officer at Old Dominion University effective October 15, 1992.

Upon the recommendation of our Radiation Safety Committee, I am requesting approval to amend our license (45-09599-03) to allow Mr. Scott Sechrist to serve as the University's Radiation Safety Officer, effective immediately. Mr. Sechrist has served as the Radiation Safety Officer previously (1988-89) and has been a member of our Radiation Safety Committee for the past five years. A copy of his vita is enclosed for your review.

I have been informed by Ms. Marnella Rodriguez in your Washington Office that Old Dominion University is exempt from all fees in making this amendment to our license.

Sincerely,

John S. Eck  
Associate Vice President for  
Research and Graduate Studies

jse:adb  
attachment

cc: Dr. Jo Ann Gora, Provost  
Mr. Richard Staneski,  
Vice President for Administration and Finance  
Mr. David Girardot, Director, Physical Plant  
Dr. George Wong, Chairman, Radiation Safety Committee  
Mr. Scott Sechrist, Assistant Professor, Department of  
Medical Laboratory Sciences

RECEIVED BY LFDCB	
Date	10/22/92
Log	OCT 26 II
By	SAC
Date Completed	10/26/92

FFF EXEMPT

170.11(a)(4)

See sheet noted

## CURRICULUM VITAE

NAME: SCOTT RICHARD SECHRIST

### EDUCATION:

May 1975 OLD DOMINION UNIVERSITY  
Norfolk, Virginia  
Bachelor of Science  
Major: Physical Science

August 1979 UNIVERSITY OF NORTH CAROLINA  
Chapel Hill, North Carolina  
Certificate in Nuclear Medicine Technology

August 1989 OLD DOMINION UNIVERSITY  
Norfolk, Virginia  
Master of Science in Community Health  
Education.

### EXPERIENCE:

October 1975 NORFOLK NAVAL SHIPYARD  
- June 1978 Portsmouth, Virginia

#### Physical Science Technician

Responsibilities included performing health physics/radiologic control procedures during naval vessel overhaul, monitoring of shipyard personnel for radioactive contamination, and obtaining and analyzing environmental radiation surveys.

August 1979 - MEDICAL CENTER HOSPITALS  
September 1981 Norfolk General Hospital  
Norfolk, Virginia

#### Staff Nuclear Medicine Technologist

Performed clinical nuclear medicine imaging procedures.

Developed and taught an 11 week course in nuclear medicine technology for senior radiologic technology students.

November 1981 -  
December 1982

MEDICAL CENTER HOSPITALS  
Leigh Memorial Hospital  
Norfolk, Virginia

Chief Technologist

Responsibilities included performance of clinical imaging procedures and supervision of employees in Nuclear Medicine and Ultrasound departments. Assisted in designing of nuclear medicine department.

January 1983  
- July 1987

LEXINGTON COMMUNITY COLLEGE  
Lexington, Kentucky

Assistant Professor and Program Coordinator

Responsibilities included administration of Associate Degree program in Nuclear Medicine Technology, instruction and advising of students, coordination of clinical education, development and implementation of community service and continuing education programs, and institutional service.

August 1987  
to present

OLD DOMINION UNIVERSITY  
Norfolk, Virginia

Assistant Professor and Program Director -  
Nuclear Medicine Technology

Responsibilities include: design and implementation of a Baccalaureate program in Nuclear Medicine Technology, establish on-campus laboratory, recruitment, advising and instruction of students, coordination of clinical education, community service, continuing education, and professional service. Obtained accreditation for Nuclear Medicine Technology program.  
Coordinate university portion of Radiation Therapy Technology (RADT) tract in Bachelor of Science in Health Sciences (BSHS) program.

## PUBLICATIONS:

## Articles

Sechrist, S. R., & Frazer, G. H. Identification and ranking of stressors in nuclear medicine technology. Journal of Nuclear Medicine Technology, 1990, 1:44-48.

Kreider, R.B., Drews, T., Drinkard, B., Cortes, Somma, C.T., Sechrist, S.R., Lester, C., Woodhouse, M. & Shall, L.M. Bioenergetic and nutritional demands of multistage ultraendurance cycling. Proceedings of the I World Congress on Sports Nutrition. 1: 1991.

Kreider, R.B., Miller, G.W., Mitchell, M., Cortes, C.W., Miriel, V. Somma, C.T., Sechrist, S.R. & Hill, D. Effects of amino acid supplementation on ultraendurance triathlon performance. Proceedings of the I World Congress on Sports Nutrition. 1:1992.

Sechrist, S.R., & Frazer, G.H. Occupational stressors in Radiography. Radiologic Technology, Accepted October 5, 1992, publication date: Nov./Dec 1992.

## Published Abstracts

Sechrist, S. R., Frazer, G. H. Job stress among nuclear medicine technologists, American Society of Allied Health Professions - 23rd Annual Meeting Abstracts, 11: 1990.

Kreider, R. B., C. Cortes, T. Drews, B. Drinkard, S. Sechrist, T. Somma, C. Lester, M. Woodhouse, L. Shall. Protein glucogenesis in repeated ultraendurance cycling. 1990 Proceedings Federation of American Societies of Experimental Biology (FASEB), 4(3):A282, 1990.

Kreider, R., Cortes, T. Drews, B. Drinkard, S. Sechrist, T. Somma, C. Lester, M. Woodhouse, L. Shall. Evidence of hemolysis, altered hormonal and vitamin status, fecal blood loss, and anemia in response to multi-stage ultraendurance cycling. Southeast American College of Sports Medicine Meeting Conference Abstracts. 18:7, 1991.

Kreider, R. C. Cortes, T. Drews, B. Drinkard, S. Sechrist, T. Somma, C. Lester, M. Woodhouse, L. Shall. Evidence of hemolysis, altered hormonal and vitamin status, fecal blood loss, and anemia in response to multi-stage ultraendurance cycling. International Journal of Sports Medicine. 12:252, 1991.

- Kreider, R.B., Miller, G.W., Mitchell, M., Cortes, C.W., Miriel, V., Somma, C.T., Sechrist, S.R. & Hill, D. Effects of amino acid supplementation on ultraendurance triathlon performance. I World Congress on Sports Nutrition Conference Abstracts. 1:9-10, 1991.
- Kreider, R.B., Drews, T., Drinkard, B., Cortes, Somma, C.T., Sechrist, S.R., Lester, C., Woodhouse, M. & Shall, L.M. Bioenergetic and nutritional demands of multistage ultraendurance cycling. I World Congress on Sports Nutrition Conference Abstracts. 1:11-12, 1991.
- Sechrist, S.R. & Coleman, F.E. Incorporating writing across the curriculum for the medical laboratory sciences, American Society of Allied Health Professions 24th Annual Meeting Abstracts. April, 1991.
- Sechrist, S.R. & Frazer, G.H. Occupational stressors in radiography, American Society of Allied Health Professions 24th Annual Meeting Abstracts. April, 1991.
- Bertun, E., R.B. Kreider, M. Mitchell, G.W. Miller, V. Miriel, C. Cortes, D. Hill, T. Somma, & S. Sechrist. Effects of ultraendurance triathlon performance on serum enzyme levels. Southeast American College of Sports Medicine Meeting Conference Abstracts. 19:1, 1992.
- Miriel, V., R.B. Kreider, M. Mitchell, G.W. Miller, C. Cortes, D. Hill, T. Somma, & S. Sechrist. Analysis of electrolyte intake and serum electrolyte levels during an ultraendurance triathlon. Southeast American College of Sports Medicine Meeting Conference Abstracts. 19:2, 1992.
- Dowling, E., R.B. Kreider, M. Mitchell, G. Miller, V. Miriel, C. Cortes, D. Hill, S. Sechrist & T. Somma. Effects of ultraendurance triathlon performance on psychological profiles of exertion, feeling, and mood. Southeast American College of Sports Medicine Meeting Conference Abstracts. 19:12, 1992.
- Kreider, R.B., M. Mitchell, G. Miller, V. Miriel, C. Cortes, D. Hill, T. Somma, & S. Sechrist. Bioenergetic and nutritional analysis of an endurance triathlon. Southeast American College of Sports Medicine Meeting Conference Abstracts. 19:17, 1992.
- Redondo, D., R.B. Kreider, M. Mitchell, G.W. Miller, V. Miriel, C. Cortes, D. Hill, S. Sechrist & T. Somma. Analysis of temperature regulation and fluid homeostasis during an ultraendurance triathlon. Southeast American College of Sports Medicine Meeting Conference Abstracts. 19:24, 1992.

- Bertun, E., R.B. Kreider, R. Ratzlaff, J. Edwards, D. Redondo, E. Dowling, V. Miriel, M. Williams, T. Somma, S. Sechrist, F. Coleman, & J. Gentry. Effects of amino acid and carnitine supplementation during swim training on immune status I: Lymphocyte subpopulations. Medicine and Science in Sport and Exercise. 24(4):S1, 1992.
- Kreider, R.B., R. Ratzlaff, E. Bertun, J. Edwards, D. Redondo, E. Dowling, V. Miriel, M. Williams, T. Somma, S. Sechrist, F. Coleman, & Gentry, J. Effects of amino acid and carnitine supplementation during swim training on immune status II: Response to mitogen stimulation. Medicine and Science in Sport and Exercise. 24(4):S1, 1992.
- Redondo, D., R.B. Kreider, V. Miriel, E. Dowling, E. Bertun, M. Williams, T. Somma, S. Sechrist, F. Coleman, & J. Gentry. Effects of amino acid and carnitine supplementation on protein degradation and substrate use in intercollegiate swimmers. Medicine and Science in Sport and Exercise. 24(4):S2, 1992.
- Dowling, E., R.B. Kreider, M. Mitchell, G. Miller, V. Miriel, C. Cortes, D. Hill, S. Sechrist & T. Somma. Effects of ultraendurance triathlon performance on psychological profiles of exertion, feeling, and mood. International Journal of Sports Medicine. 13:In press, 1992.
- Sechrist, S.R., Coleman, F., & G. Frazer. Occupational stressors in medical technology. 60th Annual Meeting and Exposition of the American Society For Medical Technology Abstracts. Boston, Massachusetts: 5(3):5, 1992.
- Sechrist, S.R., G. Frazer. A comparison of worksite stressors in three allied health fields. Association of Schools of Allied Health 25th Annual Meeting Abstracts. November, 1992.
- Sechrist, S.R., F. Coleman, & G. Frazer. Job stressors in the medical laboratory sciences. Association of Schools of Allied Health 25th Annual Meeting Abstracts. November, 1992.
- Frazer, G., R. Spear, & S.R. Sechrist. Perceptions of health as a concept influencing health care decisions among allied health students. Association of Schools of Allied Health 25th Annual Meeting Abstracts. November, 1992.

## Technical Reports

Sechrist, S.R. The Program in Nuclear Medicine Technology - Old Dominion University: Self-Study document submitted to the Joint Review Committee on Educational Programs in Nuclear Medicine Technology. 262 pages, April 1989.

Sechrist, S.R., & J. Eck. Annual Review of the Old Dominion University Radiation Safety Program: In accordance with Nuclear Regulatory Commission (NRC) requirements, a review team reviewed Radiation Safety program at O.D.U. and produced a document outlining the team's findings. June 19, 1990.

Sechrist, S.R. Assessment Report: The Program in Nuclear Medicine Technology. A report outlining the proposed assessment plan for the program in Nuclear Medicine Technology. March 15, 1991. Follow-up report: June, 1992.

# RESEARCH PRESENTATIONS:

Sechrist, S.R., G. Frazer. Job stress among nuclear medicine technologists. 23rd Annual Conference - American Society of Allied Health Professions. Philadelphia, Pennsylvania; November 4, 1990.

Sechrist, S.R. & F. Coleman. Incorporating writing across the curriculum for the medical laboratory sciences. 24th Annual Meeting American Society of Allied Health Professions. Lexington, Kentucky; November 6, 1991.

Sechrist, S.R. & G. Frazer. Occupational stressors in radiography. 24th Annual Meeting American Society of Allied Health Professions. Lexington, Kentucky; November 6, 1991.

Sechrist, S.R., F. Coleman, & G. Frazer. Worksite stressors in the medical laboratory sciences. Virginia Society for Medical Technology Spring Meeting, Virginia Beach, Virginia; March 27, 1992.

Coleman, F.E., S. Sechrist, & G. Frazer. Worksite stressors in the medical laboratory sciences. 60th Annual Meeting and Exposition of the American Society For Medical Technology. Boston, Massachusetts; June 28, 1992.

Sechrist, S.R., G. Frazer. A comparison of worksite stressors in three allied health fields, Association of Schools of Allied Health, 25th Annual Meeting. Orlando, Florida. November, 1992.

# POSTER SESSIONS:

Sechrist, S.R., F. Coleman, & G. Frazer. Job stressors in the medical laboratory sciences. Association of Schools of Allied Health, 25th Annual Meeting. Orlando, Florida. November, 1992.

Frazer, G., R. Spear, & S.R. Sechrist. Perceptions of health as a concept influencing health care decisions among allied health students, Association of Schools of Allied Health, 25th Annual Meeting. Orlando, Florida. November, 1992.

## GRANTS FUNDED:

Co-Principal Investigators: Scott Sechrist, Faye E. Coleman.  
 Agency: College of Health Sciences Faculty Research  
 Title: "Identification and Ranking of Stressors In  
 Medical Technology".  
 Dates: May 1991 - September 1991.  
 Amount: \$1028.00.

Principal Investigator: Rick Kreider  
 Co-Principal Investigators: Scott R. Sechrist, Tom Somma.  
 (Radioimmunoassay section).  
 Agency: Advance Sports Nutrition.  
 Title: Effects of sodium phosphate supplementation on  
 metabolic and myocardial adaptations to cycling  
 performance.  
 Dates: May 1990 - May 1992.  
 Amount: \$12,000.00. (Cash award to ODURF).

Principal Investigator: Rick Kreider  
 Co-Principal Investigators: Scott R. Sechrist, Tom Somma.  
 (Radioimmunoassay section).  
 Agency: Advance Sports Nutrition.  
 Title: Effects of amino acid supplementation on  
 hormonal, hematological, and immune status  
 throughout a collegiate swim season.  
 Dates: August 1991 - August 1996.  
 Amount: \$65,000.00. (Cash award to ODURF).  
 \$20,000.00. ((Supplies).

## GRANTS APPLIED FOR:

Principal Investigator: Lindsay Rettie  
 Co-Investigators: Coleman, E., Coleman, F., Sachon, P.  
 Sechrist, S., Somma, C.T.  
 Agency: Bureau of Health Professions, U.S. Department of  
 Health and Human Services.  
 Title: A University Coordinated Model For Enhancing The  
 Teaching Skills of Clinically Based Faculty:  
 COMETS.  
 Dates: 10/1/91 through 9/30/93  
 Amount requested: \$296,388.00. Approved, not funded.

# RESEARCH/MANUSCRIPTS IN PROGRESS:

## Research in Progress:

"Effects of Amino Acid Supplementation on Hormonal, Hematological, and Immune Status Throughout a Collegiate Swim Season".  
Principal Investigator: R. Kreider.  
Co-P.I.'s: (Medical Lab Sciences): C.T. Somma, F. Coleman, and S. Sechrist.  
August 1991 - August 1996.

Research project, with C.T. Somma, Principal Investigator: "A Pilot Study to Determine the Effect of Natural Supplementation on Urinary Testosterone in Competitive AAU Bodybuilders". Preliminary work performed to assess variety and extent of natural supplement usage by competitive bodybuilders. July 1992 - ongoing.

## Manuscript in progress:

"Occupational stressors in the medical laboratory sciences, with Faye Coleman, and Gregory Frazer.

# CONSULTING ACTIVITIES:

Acting Radiation Safety Officer - Old Dominion University. Provide radiation safety expertise to University. Ordered radioactive materials for research projects, collected, transported, stored, and disposed of radioactive wastes. Responsible for personnel dosimetry and environmental monitoring. January - July 1989. Provide on-call services as requested during RSO absences, 1991-1992.

Provide radiation safety course for Radiologic Technology, Radiation Therapy and Cardiovascular Technology students at Sentara Norfolk General Hospital: 1988, 1989, 1990, 1991, 1992.

## PROFESSIONAL ORGANIZATIONS:

Society of Nuclear Medicine, Associate Member, 1980 to present  
 Society of Nuclear Medicine, Technologist Section, 1980 to present  
 Mid-Eastern Chapter of Nuclear Medicine Technologists, 1981 - 1982, 1987 to present  
 Tidewater District Society of Nuclear Medicine Technologists - President (1990 - 1992).

## CERTIFICATIONS:

Nuclear Medicine Technology Certification Board (NMTCB)  
 American Registry of Radiologic Technologists ARRT(N)  
 American Society of Clinical Pathologists ASCP(NM)

## UNIVERSITY SERVICE:

Acting Radiation Safety Officer - Old Dominion University: January 1989 - July 1989.

## University Committees:

Committee C - Library, 1992.  
 Radiation Safety Committee - 1988, 1989, 1990, 1991, 1992.  
 R.S.O. (Radiation Safety Officer) Search Committee - 1989.  
 Academic Television Services: Director Search Committee - 1991, 1992.  
 Academic Television Services: Teleconferences Director Search Committee - 1991, 1992.  
 Library Collection and Development Committee - 1989, 1992.  
 Scholarship Committee - 1988, 1989, 1990, 1991, 1992.  
 (Chair, Merit-Based Scholarships Subcommittee, 1992).  
 SACS Institutional Review - Institutional Research Committee, 1990, 1991.  
 Undergraduate Appeals Committee - 1991.

## College of Health Sciences:

Computer Committee - Chair, 1989, 1991.  
 RAC Committee (Recruitment, Advising and Continuanace) - 1987, 1988, 1989, 1990, 1991.  
 Library Committee 1987, 1988, 1989, 1990, 1991. (Chair, 1992).  
 Computer Center Committee (Co-chair, 1991) Chair, 1992.  
 Physical Therapy Admissions Committee - 1990, 1992.  
 Strategic Planning Committee - 1992

"Partners For Success" Program, Division of Student Services: designed to pair up faculty as mentors to entering freshmen who wish to learn more about specific disciplines. 1990, 1991, 1992.

## PROFESSIONAL SERVICE:

Item writer for National Certification Board, NMTCB Exam, 1986, 1987, 1988, 1989, 1990, 1991.

Nuclear Medicine Technology Textbook  
 Reviewer: C.V. Mosby Company, St. Louis Mo. 1987, 1988, 1989

President, Tidewater District Society of Nuclear Medicine Technologists 1990-1992.

Nominating Committee - Southeastern Chapter, Society of Nuclear Medicine, 1990.

Radiologic Technology Program, Sentara Norfolk General Hospital. Member, Advisory Committee, 1992.

## COMMUNITY SERVICE:

Member - Academic Affairs Committee  
 Old Dominion University Alumni Association 1989, 1990.

Chair, Library Affairs Committee, 1990.

"Nuclear Medicine Week" - Television program: Speaking of Hampton Roads, interview. WAVY-TV. Portsmouth, VA., July 16, 1990.

"Nuclear Medicine Imaging" - To the Virginia Beach Beachcombers Kiwanis Club. September 11, 1991.

"Career Opportunities in Nuclear Medicine Technology" - To the Rosemont Middle School Science Classes. Norfolk, Virginia. February 18, 1992.

HONORS/AWARDS:

Mallinckrodt Award - August 1979  
"Outstanding Student in Nuclear Medicine Technology" - University of North Carolina Memorial Hospital.

Alpha Eta - Member, Allied Health Honorary Society. Inducted: April 1992

**TEACHING/ADMINISTRATION:**

As Program Director,  
Nuclear Medicine Technology

**Courses taught**

- NMED 300 - Medical Terminology (3 cr.)
- RADT 301 - Radiation Protection for Radiologic Technologists (2 cr.)
- NMED 331 - Fundamental Concepts in Nuclear Medicine Technology (3 cr.)
- RADT 331 - Radiation Physics for Radiation Therapists (3 cr.) Telecourse (1989-91).
- NMED 401 - Nuclear Medicine Technology I (4 cr.)
- NMED 402 - Nuclear Medicine Technology II (4 cr.)
- NMED 410 - In Vitro Nuclear Medicine Technology (2 cr.)
- NURS 393 - Clinical Skills for Non-Nursing Majors (2 cr.) \* Taught by Phyllis Barham  
Radiopharmaceutical Lab Section taught by Scott Sechrist.
- NMED 495 - Special Topics in Nuclear Medicine Technology (3 cr.)

**Course Coordinator**

- NMED 440 - Clinical Nuclear Medicine Technology I  
Clinical Practicum offered at various clinical affiliates: Summer (8 cr.)
- NMED 450 - Clinical Nuclear Medicine Technology II  
Clinical Practicum offered at various clinical affiliates: Fall (9 cr.)
- NMED 460 - Clinical Nuclear Medicine Technology III  
Clinical Practicum offered at various clinical affiliates: Spring (9 cr.)

**Courses Administered**

- NMED 332 - Nuclear Instrumentation (4 cr.)  
(Taught by Dr. Leland Kirkland, 1988-1992)
- NMED 335 - Radiation Health (3 cr.)  
(Taught by Mr. Tony Towns, 1988; Mr. John Bishop, 1989, 1990, Ms. Andrea Geyer, 1992).

NMED 403 - Radiopharmacy (3 cr.)  
(Taught by Dr. Clifford McClendon, 1988-1992).

#### **Invited/Guest Lecturer**

CHP 664 - Health Care Services: "Diagnostic Imaging - The Costs of Medical Technology", May 19, 1988.

CHP 720/820 - Health Care Delivery Systems: "The Technology of Medical Imaging", May 23, 1989, May 22, 1990, May 23, 1991, May 21, 1992.

ELS 121 - Career Planning Symposium - March 16, 1988.

HLTH 101 - "An Introduction to Medical Imaging"  
Oct. 24, 1988, Oct. 15, 1990.

HLTH 395 - "Occupational Stress in the Health Sciences"  
(Telecourse Panel Discussion) January 22, 1992.

MEDT 210 - "What is Nuclear Medicine Technology?"  
Nov. 2, 1987, Nov. 7, 1988, Nov. 27, 1989, Oct. 22, 1990, November 18, 1991.

MEDT 403/503 - "Writing Effective Resumes" Oct. 20, 1987, Nov. 8, 1988, Oct. 24, 1989.

PT 434 - "What is Nuclear Medicine Technology". For Physical Therapy students - Feb. 1, 1988.

PT 638 - "Clinical Nuclear Medicine Technology"  
For Clinical Sciences IV - P.T. Students.  
Jan. 17, 1989, Jan. 25, 1990, Jan. 23, 1992.

SNGH Radiation Therapy Department: "Interrelationships between the Nuclear Medicine and Radiation Therapy Departments" - May, 31, 1990.

#### **Faculty Sponsor**

BIOL 405 - Senior Biology Seminar, Fall 1987,  
Sponsored/Evaluated: Lisa Cole - "Monoclonal Antibodies"

BIOL 405 - Senior Biology Seminar, Nov. 5, 1990,  
Sponsored/Evaluated: Tammie Brenzovich  
- "201-Thallium Cardiac Imaging"

### Thesis Committees

- Sonya Seward - "Quantitative Respirator Fit Testing: Probed Facepiece versus Probed Cartridge" Defense: July, 1990. Chaired by Dr. Greg Frazer.
- Kaye Wells - "Rationale for Non-Utilization of the Cytobrush Technique". Defense: April, 1991. Chaired by Faye Coleman.
- Lynn Calaman - "Comparative Study of Proficiency Testing Scores Among Medicare Licensed Laboratories Following Implementation of Revised Federal Regulations". Chaired by Faye Coleman. December 1991 - ongoing.
- Susan Daniels - "A Comparative Analysis of Clinical Laboratory Turnaround Times Before and After Implementation of a Laboratory Information System (LIS)". Chaired by Dr. Diane Loekle. March 1992 - ongoing.
- Toni M. Vargas - "Awareness of and Rights Related to the Patient Self Determination Act of 1990 by Selected Post-Adolescent College Students." Defense: July 6, 1992.

### Equipment Donations:

Negotiated the donation of the following pieces of nuclear medicine equipment:

Technicare Gamma camera/ Imager -  
Beta Enterprises, Richmond, Va. May, 1988.  
Value: \$11,000.00

Imaging Bed - Chesapeake General Hospital.  
June 1991.  
Value: \$400.00

Ohio-Nuclear Model 450 Computer -  
Beta Enterprises, Richmond, Va. August, 1991.  
Value: \$2,000.00

Searle Scintillation Camera/ Imager-  
Sentara Norfolk General Hospital. June 1991.  
Value: \$1,500.00

October 1992