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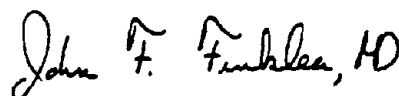
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FOREWORD

There is a growing awareness of the complex interrelationships inherent in national well-being and safety and health considerations in the work place. The enactments into law of the Federal Coal Mine Health and Safety Act of 1969 and the Occupational Safety and Health Act of 1970 have served to focus attention on the importance of these matters and to channel efforts to deal with the hazards that beset and threaten our working population. Among the declared congressional purposes in promulgating these pieces of legislation is the protection of the health and safety of "our most precious resource" - human beings - "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources."

The National Institute for Occupational Safety and Health (NIOSH) has among its responsibilities the development of an adequate supply of qualified manpower and womanpower to carry out the purposes of the Act of 1970. Toward this end, the training grant mechanism provides a particularly useful instrument. Training grant funds are used to support, strengthen, and extend training at educational institutions not only in the traditional occupational safety and health disciplines such as prepare qualified industrial hygienists, safety engineers, industrial physicians, toxicologists, and industrial health nurses, but also in innovative programs which may prepare new types of specialists as exemplified by the Occupational Safety and Health Professional. Paraprofessional and technician training and curriculum development in keeping with the mission of the NIOSH are appropriate activities for training grant support.

This booklet has been prepared to describe the programs supported by training grant funds. This information should be of assistance to educational and training institutions with ongoing or contemplated programs in occupational safety and health manpower development and also to students considering career opportunities.



John F. Finklea, M.D.
Director
National Institute for
Occupational Safety and Health

INTRODUCTION

Training grants are available to colleges, universities, and other public or private non-profitmaking instructional institutions for the purpose of supporting programs designed to prepare researchers, administrators, teachers, professional practitioners, technologists, and technicians in all aspects of occupational safety and health subject matter areas. All levels of training may be supported for both long-term (one year or longer) or short-term (less than one year) duration. Grants for long-term projects are intended to provide training in the fields of, among others, occupational medicine, industrial hygiene, industrial nursing, and occupational safety engineering. Short-term training generally is designed for updating or expanding the skills and knowledge of individuals who have satisfactorily completed basic professional preparation for employment in one of the occupational safety and health professions or occupations.

Curriculum development and instructional methodology development in appropriate occupational safety and health areas are eligible for grant support.

NIOSH will accept applications for postdoctoral research and teaching fellowship awards in areas specific to the field of occupational safety and health. Consideration will be given to applicants who have demonstrated a commitment to these areas by virtue of previous training, experience, and/or recognized contributions to the field.

Grants are made under the authority of the applicable legislation and in accordance with the prescribed rules and regulations of the Department of Health, Education, and Welfare and the National Institute for Occupational Safety and Health. All applications for training grant support are initially reviewed according to established schedules by a consultative committee of distinguished technical and educational experts who provide objective appraisals of scientific and training merit of each proposal. These recommendations are then reviewed by the Institute for a funding determination within available budgets, taking into account program relevance and consonance with public policy.

All questions and inquiries on admissions to programs, prerequisites, student benefits, student eligibility, course curricula, and the like should be addressed to the individual program directors at their respective institutions.

All inquiries about training grant applications, eligibility, guidelines, review schedules and the like should be addressed to:

Assistant Institute Director for Extramural Activities
National Institute for Occupational Safety and Health
Room 501, U.S. Post Office and Courthouse Building
Fifth and Walnut Streets
Cincinnati, Ohio 45202

Grateful acknowledgement is made to all who contributed to the preparation of this booklet.

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AUBURN UNIVERSITY
Auburn, Alabama

Grant Number: 2 T01 OH 00162-04

Program Title: Training Program in Occupational Safety and Health

Degrees Offered: Bachelor of Industrial Engineering

Objectives: The aim of the program is to develop professional persons at the bachelor's degree level who would be qualified to work at the operational level of occupational safety and health specialities in government and in industry.

Prerequisites: For the professional baccalaureate degree level program, candidates are graduates of high schools, junior college transfer students, as well as students from other universities meeting the normal entrance requirements of the Auburn University School of Engineering.

Curriculum: For the Bachelor of Industrial Engineering degree program, a total of about 210 quarter credit hours including required physical education (3 hours) and optional basic ROTC (6 hours) are prescribed. The specialization in occupational safety and health is introduced in the junior year and in the senior year approximately half of the hours are directly related to occupational safety and health. It is anticipated that this program will continue to expand, with potential development into a master's level curriculum to be offered in parallel or in succession.

Address all communications to:

Dr. George H. Brooks
Department of Industrial Engineering
Auburn University
Auburn, Alabama 36830

CALIFORNIA STATE UNIVERSITY
Northridge, California

Grant Number: 1 T01 OH 07006-01

Program Title: Occupational Health and Safety Training Program

Degrees Offered: B.S., M.S.

Objectives: The aim is to train industrial hygiene and safety specialists for professional field practice.

Prerequisites: Trainees in the baccalaureate program are expected to complete successfully a college-level basic sciences core including as a minimum, precalculus mathematics (algebra, trigonometry), physics, biology including physiology, and chemistry. Master's degree candidates are expected to have, as a minimum, a baccalaureate degree in occupational safety and health, or its equivalent. Applicants not meeting the minimum admission requirements are expected to complete an appropriate qualifying program.

Curriculum: The baccalaureate program includes didactic and practical work in occupational safety and health. The master's level program is of 12 to 18 months duration.

Representative courses include:

- occupational health
- industrial hygiene measurements
- industrial toxicology
- radiological health
- accident prevention and industrial safety

Address all communications to:

Dr. Dennis L. Kelly
California State University, Northridge
18111 Nordhoff Street
Northridge, California 91324

CATONSVILLE COMMUNITY COLLEGE
Catonsville, Maryland

Grant Number: 1 T02 OH 07026-01

Program Title: Occupational Safety and Health Technology

Degrees Offered: A.A.; Certificate in Occupational Safety and Health

Objectives: The aim of this program is to prepare technicians and technologists qualified for occupational safety and health careers in industry and government. Concomitantly, graduates of this program would be qualified to pursue higher level studies leading to more advanced degrees.

Prerequisites: Candidates are admitted with a high school diploma or the equivalent. Experience and/or desire to pursue a career in occupational safety and health are favorable factors in considering admission.

Curriculum: The program normally is of two-year's duration for full-time study. Sixty-three semester credit hours are required. The Certificate Program requires completion of 34 credit hours at the proficiency of 2.0 or better. Didactic instruction is augmented by field trips. The full curricula are as follows:

OCCUPATIONAL SAFETY & HEALTH TECHNOLOGY PROGRAM

Freshman Year		
	<u>1st Sem.</u>	<u>2nd Sem.</u>
Orientation to College (ORL 1.)	0	
Craft of Composition (ENG 101)		3
Blueprint Reading (AED 141)	2	
Occupational Safety & Health I & II (OST 101-102)	3	3
Introduction to Industrial Hygiene (OST 203)		3
Safety and Health Standards (OST 111)	3	
Physical Science II (CHE 101-102)	4	
Industrial Physics (PHY 121)		4
Construction Safety & Health (OST 121)		3
Technical Mathematics I (MAT 111)	<u>3</u>	<u>3</u>
TOTAL SEMESTER HOURS	15	16

CATONSVILLE COMMUNITY COLLEGE

Sophomore Year

	<u>1st Sem.</u>	<u>2nd Sem.</u>
Human Relations (PSY 106)		3
Recognition & Control of Physical and Health Hazards (OST 236)	3	
Accident Prevention & Loss Control (OST 141)		3
Advanced Industrial Hygiene (OST 231)	3	
Industrial Fire Hazards (FPT 122)		3
Introduction to Literature (ENG 102)		3
Speech Elective	3	
Social Science Elective	3	
Technical Writing (ENG 151)	3	
Life Fitness & Enrichment	1	1
Human Factors in Safety (OST 146)		3
TOTAL SEMESTER HOURS	16	16

NOTE: For those desiring to pursue a career in the Industrial Hygiene field, General Chemistry and Qualitative Analysis I & II (CHE 111-114) may be substituted for Physical Science, Industrial Physics, and Construction Safety and Health Courses.

OCCUPATIONAL SAFETY & HEALTH CERTIFICATE PROGRAM

	<u>CREDITS</u>
Occupational Safety & Health I (OST 101)	3
Safety and Health Standards (OST 111)	3
Occupational Safety and Health II (OST 102)	3
Introduction to Industrial Hygiene (OST 203)	3
Construction Safety & Health (OST 121)	3
Physical Science II (CHE 101-102)	4
Recognition & Control of Physical and Health Hazards (OST 236)	3
Advanced Industrial Hygiene (OST 231)	3
Accident Prevention and Loss Control (OST 141)	3
Industrial Fire Hazards (FPT 122)	3
Human Factors in Safety (OST 146)	3
TOTAL SEMESTER HOURS	34

NOTE: For those desiring to pursue a career in the Industrial Hygiene field, General Chemistry and Qualitative Analysis I & II (CHE 111-114) may be substituted for Physical Science and Construction Safety and Health courses.

CATONSVILLE COMMUNITY COLLEGE

Address all communications to:

Mr. Francis A. Valentino
Catonsville Community College
800 South Rolling Road
Catonsville, Maryland 21228

CLEMSON UNIVERSITY
Clemson, South Carolina

Grant Number: 1 T01 OH 00235-01

Program Title: Occupational Safety and Health

Degrees Offered: B.S., M.S.

Objective: This is principally an undergraduate program with strong emphasis in Administrative Management. The training is directed toward the production of operating junior level Safety Professionals. The master's program which is not intended to be a logical extension of the bachelor's program offers a concentration in occupational safety and health within a management framework.

Prerequisites: Baccalaureate level candidates are high school graduates admitted through the normal admission procedures of Clemson University. Graduate degree candidates, who may be engineering or management students, are expected to meet departmental admission requirements for the master's degree.

Curriculum: Since this program is primarily an undergraduate one, students who are selected on the basis of academic performance and professional interest, will begin specialized courses in occupational safety and health in their third (junior) year. Two core courses, however, are listed in the second year curriculum. A total of ten occupational safety and health courses (one being a practicum) and two electives (selected from a list of ten) are required for the B.S. degree. For the M.S. degree, candidacy is open to engineering and management students who will be expected to take five graduate level courses, including two units of research, in occupational safety and health, four required graduate courses in management, and six hours in a minor subject.

Safety and Health Core Courses (Undergraduate):

SH 201	Scope and Functions of a Safety Professional
SOC 351	Industrial Sociology
SH 301	Accident Prevention and Loss Control Procedures
SH 302	Measurement of Effectiveness of Accident Prevention Controls
SH 303	Occupational Accident Prevention
IM 307	Personnel Management
SH 401	System Safety
SH 402	Occupational Safety Field Operations
SH 403	Fire Protection - Prevention
SH 404	Occupational Health Management

Safety and Health Restricted Electives List:

SH 410	Public Safety
SH 411	Product Safety
EnH 471	Man and His Environment
Econ 306	Risk and Insurance
Ind Ed 325	Industrial Organization and People
Ed 458	Health Education

M.S. in Management Science with Major Concentration in
Occupational Safety and Health

Safety and Health Core Courses (Graduate):

SH 891	Research
SH 803	Advanced Accident Prevention and Loss
SH 801	Advanced Safety System Control
SH 802	Safety and Health Administration
Mgt 816	Management of Human Resources

Required Management Courses:

Mgt 801	Quantitative Economic Analysis
Mgt 802	Finance or
Mgt 803	Production Management or
Mgt 805	Quality Control
Mgt 804	Managerial Policy

Address all communications to:

Dr. Donald W. Lyons
College of I.M. & T.S.
Clemson University
Clemson, South Carolina 29631

COLORADO STATE UNIVERSITY
Fort Collins, Colorado

Grant Number: 1 T01 OH 07039-01

Program Title: Occupational Health and Safety Training Program

Degrees Offered: B.S.; M.S. (prospective)

Objectives: This program seeks to strengthen the occupational safety and health components of the established environmental health program.

Prerequisites: Minimum admission requirements for the undergraduate program include graduation from an accredited high school, submission of satisfactory SAT or ACTP scores, and presentation of evidence of satisfactory completion of 10 academic units of English, foreign languages, mathematics, science and social studies.

For the graduate program, the candidate must have passed the G.R.E. and satisfy the Department of Microbiology requirements for graduate study. Applicants should have a 3.0 grade point average and a science background.

Curriculum: This program is unique in that it is administratively located in the Department of Microbiology but has multidisciplinary representation and numerous joint appointments of instructional staff. Laboratory work, field exercises, and guest lectures for special topics are integral parts of the program.

In the baccalaureate program, the curriculum includes intensive specialization in occupational health and safety in the junior and senior years. The senior year program includes work in methods and analysis, occupational health and safety, environmental toxicology, public health administration, environmental health engineering, and public health practice. In the final 10 weeks, the student is assigned to work in a department of public health or occupational safety and health agency.

The graduate program which is designed with flexibility, contains offerings from departments of many colleges of the University, such as Engineering, Chemistry, Veterinary Medicine, and Biomedical Science.

Seminars, guest lectures, and individualized practices are integral components of the curriculum. Research activities comprise essential salient features of this program.

COLORADO STATE UNIVERSITY

Address all communications to:

Dr. Roy M. Buchan
Department of Microbiology
College of Veterinary Medicine and
Biomedical Science
Colorado State University
Fort Collins, Colorado 80523

FERRIS STATE COLLEGE
Big Rapids, Michigan

Grant Number: 2 T01 OH 00205-02

Program Title: Occupational Safety and Health Undergraduate Training

Degrees Offered: Associate in Applied Science (A.A.S.); B.S.

Objectives: The program aim is to prepare practitioners for service in occupational safety and industrial hygiene, at the technician and technologist levels.

Prerequisites: Candidates are recruited from among holders of high school diplomas or certificates of equivalency.

Curriculum: The two-year curriculum comprises course offerings in the area of occupational safety and health as conducted in the School of Technical and Applied Arts and general liberal arts courses as presented in the School of General Education. The baccalaureate program includes two additional years of didactic instruction as well as an internship program, workshops, and other short-term training activities designed to augment the classroom-laboratory work. The full program which requires 99 quarter-hours for graduation, includes two summer sessions.

<u>Characteristic technical courses are:</u>	<u>Quarter Hours</u>
Technical Illustration for Occupational Safety and Health	2
Orientation to Industry	3
Occupational Safety and Accident Prevention	4
Occupational Safety and Health Laws & Regulations	5
Chemistry for O. S. & H. Technology	4
Methods and Principles of Safety Training	3
Fire Prevention and Control	3
Ventilation Application and Instrumentation	4

Address all communications to:

Mr. Robert W. Allen
Industrial Department
School of Technical & Applied Arts
Ferris State College
Big Rapids, Michigan 49307

HARVARD UNIVERSITY
Cambridge, Massachusetts

Grant Number: 1 T01 OH 07014-01

Program Title: Graduate Program in Industrial Hygiene

Degrees Offered: M.S., Sc.D., post-doctoral training

Objectives: The aim of this program is to prepare qualified industrial hygiene specialists and/or research workers in federal, state, and local health agencies or related groups in industry. The training may also aid those seeking positions on faculties of colleges and universities.

Prerequisites: All candidates must successfully satisfy the Committee on Admissions and Degrees in competition with other departments for available spaces in the School of Public Health. Candidates are recruited from among holders of baccalaureate degrees in engineering and the physical and biological sciences.

Curriculum: The program at the master's level is a flexible one and may be successfully completed in one academic year by exceptionally well-prepared and qualified students. Two academic years of study is the usual course duration. Field experience may be arranged for summer and intersession periods with the assistance of the faculty advisor.

Core course programs comprising industrial hygiene and related subjects, are required for both the one and two-year master's level programs. Cooperative arrangements may be made with MIT and other divisions of Harvard University. Forty and eighty credit units are required for completion of the one and two year programs, respectively.

Emphasis is placed on research at the doctoral level. A wide range of research areas and dissertation topics is available at the Harvard Graduate School of Arts and Sciences and the Massachusetts Institute of Technology to supplement the offerings at the School of Public Health.

Address all communications to:

Professor William A. Burgess
Harvard School of Public Health
665 Huntington Avenue
Boston, Massachusetts 02115

HOUSATONIC COMMUNITY COLLEGE
Bridgeport, Connecticut

Grant Number: 1 T02 OH 07038-01

Program Title: Occupational Safety and Health Training Program

Degrees Offered: A.S. (Associate in Science in Occupational Safety and Health); certificate

Objectives: This program seeks to prepare qualified technicians to support the activities of safety and health professionals.

Prerequisites: A high school diploma or high school equivalency diploma is the entrance requirement, consistent with the College's "open-door" admissions policy. Candidates will be drawn from industry as well as directly from high school.

Curriculum: The following represents the Associate in Science Degree Program as approved by the Commission for Higher Education, the Certificate Program and course titles.

OCCUPATIONAL SAFETY AND HEALTH

Associate in Science

<u>Course No.</u>	<u>Description</u>	<u>Credit Hours</u>
First Semester:		
English 101	Composition	3
Mathematics	Statistics	3
History of Political Science	Elective	3
OSH 101	Intro. to Occupational Safety and Health	3
OSH 103	Federal & State Codes/Standards	3
		<u>15</u>
Second Semester:		
English 102	Composition and Literature	3
Mathematics	Elective	3
Psychology 101	Intro. to Psychology	3
OSH 104	Physical Hazards I	3
OSH 105	Industrial Hygiene	3
		<u>15</u>

HOUSATONIC COMMUNITY COLLEGE

Third Semester:

English 203	Effective Speaking	3
Psychology 209 or Sociology 201	Industrial Psychology or Prin. of Sociology	3
Science	*Biology or Chemistry or Physics	4
OSH 204	Physical Hazards 2	3
OSH 201	Fire Protection	3
		<u>16</u>

Fourth Semester:

Business 211	Business Communication	3
Science	*Biology or Chemistry or Physics	4
OSH	Elective	3
OSH	Elective	3
OSH	Elective	3
		<u>16</u>

TOTAL HOURS 62

OSH Electives:	OSH 202-Motor Fleet Safety
	OSH 203-Human Factors in Safety
	OSH 205-Techniques in Industrial Hygiene
	OSH 206-Safety Program Management

Additional courses will be added when industry demands warrant such additions.

*Selection of science is dependent on student's goals.

OCCUPATIONAL SAFETY AND HEALTH

One-Year Certificate

<u>Course No.</u>	<u>Description</u>	<u>Credit Hours</u>
First Semester:		
English 101	English Composition	3
Mathematics 104	Statistics	3
OSH 101	Intro. to Occupational Safety and Health	3
OSH	Elective	3
OSH	Elective	3
		<u>15</u>

HOUSATONIC COMMUNITY COLLEGE

Second Semester:

Psychology 101	Intro. to Psychology	3
Science	Elective	3
OSH	Elective	3
OSH	Elective	3
OSH	Elective	3
		<u>15</u>
	TOTAL HOURS	<u>30</u>

Address all communications to:

Mr. Richard B. Cooper
Assistant Academic Dean
Housatonic Community College
510 Barnum Avenue
Bridgeport, Connecticut 06608

KANSAS STATE UNIVERSITY
Manhattan, Kansas

Grant Number: 5 T01 OH 00024-08

Program Title: Bio-Environmental Engineering

Degrees Offered: M.S., Ph.D.

Objectives: The aim of this program is to prepare qualified professional engineers in bioenvironmental engineering who by virtue of interdisciplinary training in cooperation with the Department of Physiological Sciences, College of Veterinary Medicine, Statistics and Computer Sciences Department, and the staff of the Institute for Environmental Research, will be able to deal with and facilitate the solution of engineering problems as they relate to man's relationship to his environment.

Prerequisites: The trainees are holders of the bachelor's degree in engineering.

Curriculum: The course of study requires approximately four years beyond the bachelor's degree level. A typical program is as follows:

First Year

Fall

		Credits
221 - 431 & 432	Organic Chemistry Lecture & Lab.	4
560 - 711	Advanced Thermodynamics I	3
740 - 431	Anatomy & Physiology	4
		<u>11</u>

Spring

020 - 421	Biochemistry	3
005 - 635	Environmental Physiology	3
560 - 642	Fine Particle Technology	3
245 - 550	Applied Mathematics	3
		<u>12</u>

Second Year

Fall

560 - 612	System Dynamics	3
560 - 835	Environmental Physiology	3
285 - 520	Statistical Methods I	3
560 - 822	Advanced Air Conditioning	3
		<u>12</u>

KANSAS STATE UNIVERSITY

Spring			Credits
560 - 842	Convection Heat Transfer		3
560 - 722	Environmental Engineering II		3
285 - 521	Statistical Methods II		3
530 - 620	Analog Computation		3
			<u>12</u>
Summer			
560 - 810	Practicum		6
<u>Third Year</u>			
Fall			
560 - 843	Radiation Heat Transfer		3
560 - 720	Design of Experiments		3
530 - 705	Control Theory (Bioengineering)		3
(Technical German I)			<u>9</u>
(Pass Language Exam)			
Spring			
560 - 731	Automatic Controls		3
530 - 710	Bioinstrumentation		3
273 - 625	Engineering Psychology		3
265 - 630	Multivariate Analysis		3
			<u>12</u>
Summer			
560 - 810	Research in Mechanical Engineering		6
(Pass Preliminary Exams)			
<u>Fourth Year</u>			
Fall			
560 - 810	Research in Mechanical Engineering		12
Spring			
560 - 810	Research in Mechanical Engineering		12

Address all communications to:

Dr. Frederick H. Rohles, Jr.
Institute for Environmental Research
Kansas State University
Manhattan, Kansas 66502

KIRKWOOD COMMUNITY COLLEGE
Cedar Rapids, Iowa

Grant Number: 1 T02 OH 07037-01

Program Title: Laboratory Equipment for Occupational Health and Safety

Description: The National Institute for Occupational Safety and Health (NIOSH) supports the provision of laboratory equipment for use in general industrial hygiene instruction. Currently, there is an Environmental Health Technology program at Kirkwood Community College that contains a five-hour course in Occupational Health and Safety. This has been going since 1968.

The College also offers short courses and seminars in industrial safety. The Industrial Hygiene course includes four areas, i.e., noise, industrial ventilation, air contaminants, and overview. It is to be expanded to include radiation hazards and personal protective equipment. In addition, the College is preparing a two-year program in occupational health and safety.

The students taking Occupational Health and Industrial Safety are taking it as a third quarter offering in "Environmental Health Assistant", one of the environmental career programs. This training is designed to equip the students to function as technicians in occupational safety and health in local city and county health departments.

Laboratory study involves the use of detector tube kits, explosimeters, anemotherm (air meters), and other devices as available. Field trips are conducted for class participants. It is desirable to take the equipment into actual work situations such as the College's vocational-technical shops (welding, etc.), local industries, and foundries.

Address all communications to:

Mr. Harold B. Kort
Environmental Education Department
Kirkwood Community College
6301 Kirkwood Boulevard, S.W.
Cedar Rapids, Iowa 52406

MARSHALL UNIVERSITY
Huntington, West Virginia

Grant Number: 1 T01 OH 00223-01

Program Title: Occupational Safety and Health Training Program

Degrees Offered: Certificate (B.S. and M.S. programs under development)

Objectives: This program is designed to train technicians and specialists equipped with additional skills to contribute to occupational safety (or health) programs in industry.

Prerequisites: Trainees are selected on the basis of the following criteria:

1. Recommendation of immediate supervisor
2. Meeting minimum requirements of Marshall University
3. Previous performance in academic work
4. Potential for improvement in present position
5. Interview

Curriculum: This is a non-degree program, comprising classroom work, in-service workshops, field trips, and technical conferences in occupational safety and health specialty areas. The major emphasis is on safety with some consideration to industrial hygiene. Some representative courses include:

Occupational Safety and Health Standards
Occupational Safety and Health Act of
West Virginia 1972
Industrial Fire Protection
Introduction to Industrial Hygiene Concepts
Fundamentals of Industrial Nursing
Occupational Safety and Health Legislation

Address all communications to:

Dr. Marvin D. Mills
Room 119 Gullickson Hall
Marshall University
Huntington, West Virginia 25701

MONTANA COLLEGE OF MINERAL
SCIENCE AND TECHNOLOGY
Butte, Montana

Grant Number: 1 T02 OH 07003-01

Program Title: Baccalaureate Training in Industrial Safety and Health

Degrees Offered: B.S. (Occupational Safety and Health)

Objectives: This is a program of undergraduate instruction designed to:

1. expand the occupational safety and health aspects of the existing Environmental Engineering Program, and
2. initiate a degree program in occupational safety and health.

Prerequisites: Trainees are high school graduates and transfer college students.

Curriculum: In the current environmental engineering curriculum, 33 of the 139 points required for the degree are specifically related to environmental engineering and are taught in the engineering science department. In the occupational safety and health curriculum, 38 of the 140 points required are specifically related to occupational safety and health. Of these 38, 12 are in subjects (courses) already part of the environmental engineering program and 22 points of new courses are to be introduced. Basic technical, life science, and behavioral courses are taught as part of the engineering curriculum by other departments.

Address all communications to:

Mr. Floyd C. Bossard
Montana College of Mineral Science
and Technology
West Park Street
Butte, Montana 59701

MOUNT SINAI SCHOOL OF MEDICINE
of the
CITY UNIVERSITY OF NEW YORK
New York, New York

Grant Number: 1 T01 OH 00219-01

Program Title: Training in Occupational Medicine

Degrees Offered: None

Objectives: This program seeks to prepare skilled occupational health physicians qualified to design, conduct, and evaluate research investigations in occupational disease problems.

Prerequisites: Trainees are selected from among well-qualified physicians with a variety of medical backgrounds and possessing a social commitment to occupational medicine.

Curriculum: This is a three-year program comprising didactic instruction, (which is held to a minimum), clinical work in occupational medicine and general medicine, personal instruction, field experience, and seminars. A core program is designed to prepare specialists in occupational medicine. Laboratory work, field studies, clinical core, and electives complete the program.

General Outline
First Year

Core program (less than 1/4 trainee time) includes:
review of occupational diseases
toxicology
basic epidemiology and biometrics
broad aspects of public health
administrative and legal problems
workmen's compensation
ethical considerations
physical sciences
Introduction to field work
Clinical core

Second Year

Introduction to experimental pathology techniques
Advanced study in pathology of selected occupational diseases
Field studies
Clinical care of patients

MOUNT SINAI SCHOOL OF MEDICINE

Third Year

This is about entirely clinical and includes planning, initiation, and management of original studies designed to meet individual trainee's interests.

Address all communications to:

Dr. Irving J. Selikoff
Mount Sinai School of Medicine of the
City University of New York
Fifth Avenue and 100th Street
New York, New York 10029

NEW YORK UNIVERSITY
New York, New York

Grant Number: 5 T01 OH 00103-05

Program Title: Occupational Biomechanics

Degrees Offered: M.S., Ph.D., non-degree training

Objectives: The aim of this program is to train graduates with backgrounds in life-science oriented branches of engineering or other appropriate disciplines for careers in applied research in Occupational Biomechanics.

Prerequisites: Candidates for admission to the program must meet the entrance requirements for graduate students at New York University. Applicants are selected from among holders of baccalaureate (and higher) degrees in engineering (safety, biomedical, biomechanical) safety educators, and others who can provide evidence of previous training and/or experience adequate for comprehension of curricular and laboratory instruction.

Curriculum: The training program for predoctoral students extends over two calendar years (four semesters and two summer sessions). During the semesters, the participants spend at least 20 hours per week on supervised research and field work in addition to formal didactic instruction. During the summer sessions, 35 hours per week are spent in supervised research. Participation in multidisciplinary research projects of not more than two-months duration, as members of small teams (2 to 3 persons) of interdisciplinary specialists (e.g., physicians, physiologists, engineers, etc.) is a requirement. Complete research management and responsibility from initial conceptualization of the project, through the fiscal, scientific, and administrative planning and execution, to the final individual report for each participant, is an integral part of this training.

At the outset of the program, trainees are instructed in the ethical and legal aspects of experimentation and working with human subjects, in the laboratory, field, and in industry.

A wide variety of course work is available throughout the program. Some typical examples are:

Biomechanics
Measurement and Evaluation in Biomechanics and Ergonomics
Multivariate Analysis
Application of Electronic Computers for Statistics
General Safety Education
Environmental Hygiene
Foundations for Safety in a Modern Society

NEW YORK UNIVERSITY

Some examples of topics for supervised laboratory work and field experience include:

Experimentation on Man in an Industrial Setting
Problems of Special Population and Age Groups at Work
Psychology in Safety Education
Problems of Women at Work
Research and Laboratory Management

Address all communications to:

Dr. Erwin R. Tichauer
The Center for Safety
Biomechanics Laboratory
New York University
400 East 34th Street
New York, New York 10016

NEW YORK UNIVERSITY
New York, New York

Grant Number: 5 T01 OH 00163-04

Program Title: Training in Occupational Safety and Health

Degrees Offered: M.S., Ph.D., non-degree postdoctoral training

Objectives: The principal aim of this program is the development of professional specialists for careers as practitioners in controlling occupational hazards. Applicants are recruited from among those in appropriate disciplines such as engineering, life and physical sciences, management, and education. The trainees acquire competence in solving broad occupational safety and health implementation problems as well as developing skills in diagnosis, evaluation, and correction of specific hazards such as may be found in most operating systems.

Prerequisites: For the master's degree program, applicants must hold acceptable baccalaureate (or higher) degrees from accredited institutions. Matriculation for the doctoral degree requires a master's degree from an approved institution, competency in written English, a minimum score of 1,000 on the Graduate Record Examination, and favorable recommendations.

Curriculum: The curriculum is comprised of courses selected from the Schools of Engineering, Medicine, Business Administration, and the Center for Safety. The work is balanced between theory and practice. The M.S. degree is the terminal one for most trainees, with the Ph.D. or postdoctoral training available on a very limited basis.

The master's degree program requires a minimum of 42 credits, of which 33 must be from a body of core courses. Electives require approval of departmental advisors. The core segment includes:

	<u>Credits</u>
Foundations of Safety for the Modern Society	6
Environmental Factors in Safety	3
Human Performance Variables in Safety	3
Industrial Safety Program: Planning, Organizing, Coordinating, and Measuring	3
Statistical and Epidemiological Approaches to Hazard Analysis	3
Occupational Health Seminar	3
Practicum in Occupational Hazards	3
Psychology in Hazard Central Education	3
Environmental Hygiene	3
Industrial Hygiene Laboratory	3

NEW YORK UNIVERSITY

The Ph.D. program which requires 36 credits beyond the master's degree, includes research for a dissertation (6 credits) and the following required courses:

	<u>Credits</u>
Departmental Seminar in Safety Progress	6
Dissertation Proposal Seminar	-
Measurement and Evaluation in Biomechanics and Ergonomics I.	-
Departmental Seminar in Biomechanics	-

Address all communications to:

Dr. John V. Grimaldi
The Center for Safety
New York University
Washington Square
New York, New York 10003

NEW YORK UNIVERSITY
New York, New York

Grant Number: 1 T02 OH 07028-01

Program Title: Occupational Safety-Health Training for Nurses

Degrees Offered: Master's degree; diploma (Occupational Health)

Objectives: This program aims at preparing qualified occupational health safety nurse practitioners especially in areas of work safety and health needs in small industries, in which the nurses often are the only staff members close to the hazard control problems.

Prerequisites: All candidates are recruited from among registered nurses. Master's degree candidates must be graduates of an accredited institution and have a minimum undergraduate G.P.A. of 2.5. Non-degree, i.e., occupational health nursing diploma students are not expected to meet the University matriculation requirements, but are expected to be persons seeking to upgrade their professional competence or meet licensure requirements.

Curriculum: The Occupational Safety and Health master's degree program at the Center for Safety requires successful completion of 43 credits. Of this number, 12 are in the Core Course segment required of all students in the Center. The balance (31 credits) may be earned from a selection of required and optional courses, subject to the approval of departmental advisors.

<u>Core Courses</u>	<u>Points</u>
Foundations of Safety for the Modern Society (60 hours, 2 terms)	6
Environmental Factors in Safety (30 hours, 1 term)	3
Human Performance Variables in Safety (30 hours, 1 term)	3

Master Degree Options

Occupational Safety and Health
Biomechanics
Occupational Health Nursing

NEW YORK UNIVERSITY

Address all communications to:

Miss Irene D. Courtenay or
Dr. John V. Grimaldi
New York University
The Center for Safety
Washington Square
New York, New York 10003

NORTH CAROLINA STATE UNIVERSITY
Raleigh, North Carolina

Grant Number: 2 T01 OH 00089-06

Program Title: Systems Safety Engineering

Degrees Offered: M.I.E. (Industrial Engineering)

Objectives: The principal goal of this continuing program is the preparation of occupational safety and health specialists, technologists and safety engineers for careers in professional practice. This is accomplished by means of the "total systems" approach encompassing relevant disciplines including: ergonomics, behavioral sciences, engineering, environmental considerations, public health, and professional ethics and practice.

Prerequisites: Trainees are recruited from among holders of baccalaureate degrees with special entrance consideration given to people with preparation in engineering and the physical sciences including the behavioral sciences and mathematics/statistics.

Curriculum: Degree requirements normally entail successful completion of about 30 credit hours of course work including a core program in "systems safety engineering", comprising the following courses:

- IE 541 - Systems Safety Engineering
- IE 544 - Occupational Biomechanics
- IE 593 - Area Seminar in Ergonomics
- IE 641 - Environmental Factors and Human Performance
- IE 693 - Seminar in Applied Ergonomics

In addition, trainees are expected to acquire a variety of skills and knowledge applicable to identification, measurement, and control of health and safety problems as encountered by the industrial worker. A practicum is included in this terminal degree program.

Address all communications to:

Dr. Richard G. Pearson
Department of Industrial Engineering
Box 5511
North Carolina State University
Raleigh, North Carolina 27607

NORTHERN VIRGINIA COMMUNITY COLLEGE
Annandale, Virginia

Grant Number: 1 T02 OH 07013-01

Program Title: Associate Degree in Occupational Safety and Health

Degrees Offered: Associate in Applied Science

- Objectives:
1. Train students at the associate degree level in Occupational Safety and Health and to provide community service workshops for middle and upper level managers and union members in understanding the Occupational Safety and Health Act. More specifically, the objectives are to recruit, train, and graduate paraprofessionals in safety and industrial health.
 2. To achieve transferability of graduates of the associate degree program to George Washington University, VPI, and the University of Virginia.
 3. To conduct Community Workshops and short-term non-credit courses for middle and upper level management and union personnel to provide them with skills in utilizing paraprofessional and professional personnel in safety programs and implementing the Occupational Safety and Health Act.

Prerequisites: A high school diploma or G.E.D. with two years of mathematics and two years of laboratory sciences are among the requirements for admission.

Curriculum: The program leading to the Associate in Applied Science degree consists of 97 quarter hours in general education, required courses, and electives. Full-time students with completed science and mathematics prerequisites can complete the program in two years.

Address all communications to:

Dr. Alyce K. Paullin
Northern Virginia Community College
8333 Little River Turnpike
Annandale, Virginia 22003

OHIO DEPARTMENT OF HEALTH
Columbus, Ohio

Grant Number: 1 A14 OH 00007-01

Program Title: Fundamentals of Occupational Health Nursing Practice

Degrees Offered: None

Objectives: This is a program for short-term training designed to upgrade the skills and knowledge of industrial nurses. The program comprises three successive one-day sessions of seminars, small-group conferences, and toll-free telephone conferences separated by four-month intervals during which trainees carry out specific course-related assignments as provided in the Independent Study Program, "Fundamentals of Occupational Health Nursing Practice" developed by the Training Division of the National Institute for Occupational Safety and Health.

The course content includes: The structure of occupational health, trends, definitions, objectives and methods of occupational health programs. Emphasis is placed on individual and group assessment, nursing care plans, data collection and record keeping, as well as program hazards identification and control to be applied within the trainee's employing agency.

Address all communications to:

Dorothy Benning, R.N.
Division of Occupational Health
Ohio Department of Health
P.O. Box 118
Columbus, Ohio 43216

OKLAHOMA STATE UNIVERSITY OF
AGRICULTURE AND APPLIED SCIENCE
Stillwater, Oklahoma

Grant Number: 1 T01 OH 00217-01

Program Title: Safety Engineering Technology Baccalaureate Program

Degrees Offered: Baccalaureate

Objectives: This program seeks to prepare technicians and technologists qualified to practice occupational safety and health specialties within industry.

Prerequisites: Admission to the program requires high school graduation or its equivalent.

Curriculum: The program content includes a wide spectrum of subjects totaling 129 semester units, including 48 in the core curriculum and 23 in related technical courses. The remainder are distributed among Mathematics and Sciences (23), Communications (9), Humanities and Social Studies (12), and Electives (14). Integrated into the core curriculum are such courses as: Fire Protection, Industrial Hygiene, Vehicle Safety, Industrial Security, and Occupational Safety. New courses are in development, including: Electrical Safety Codes, Industrial Security Applications, Occupational Safety Techniques, Elements of Industrial Hygiene, Radiological Safety, and Systems Safety Management.

Address all communications to:

Mr. Dale F. Janes
College of Engineering
Oklahoma State University of
Agriculture and Applied Science
Stillwater, Oklahoma 74074

QUINNIPIAC COLLEGE
Hamden, Connecticut

Grant Number: 1 T02 OH 07041-01

Program Title: Four-Year Baccalaureate Program in Industrial Hygiene

Degrees Offered: Certificate; B.S. (prospective)

Objectives: This program has a two-fold objective; to enhance the skills and knowledge of people currently working in occupational safety and health by providing opportunity for continuing education, and to develop new practitioners of occupational safety and health specialities.

Prerequisites: Students are recruited from high schools, science and engineering programs in colleges, industry, and government, civilian and military agencies. Disadvantaged persons are included.

Curriculum: The baccalaureate program requires 127-130 semester credits for completion distributed as follows: 49 in sciences, 36 in occupational safety and health courses, 12 in mathematics, 21 in the liberal arts, and 9-12 in various electives. The first two years consist of a basic science, mathematics, and liberal arts core. The summer following the second year is occasioned by introduction of course work in industrial hygiene and manufacturing processes.

Priority areas of importance include:

- ventilation
- noise
- toxicology
- safety-accident prevention, protection, investigations
- electrical and mechanical hazards
- ionizing and non-ionizing radiation
- occupational diseases

Other areas of consideration include:

- heat stress
- fire prevention, protection, and control
- administration of hygiene and safety programs
- ergonomics-work physiology
- in-service teaching

Address all communications to:

Dr. Michael L. Adess
School of Allied Health and Natural Sciences
Quinnipiac College
Mount Carmel Avenue
Hamden, Connecticut 06518

SAINT AUGUSTINE'S COLLEGE
Raleigh, North Carolina

Grant Number: 1 T01 OH 00225-01

Program Title: Undergraduate Occupational Safety and Health

Degrees Offered: B.S. (Occupational Health and Safety)

Objectives: The aim of this program is to train qualified practitioners of industrial hygiene for careers of service and research in government and industry.

Prerequisites: Trainees are high school graduates admitted to Saint Augustine's College on the same basis as other students.

Curriculum: The program consists of 120 units to be completed in 36 months plus three summer sessions. In addition to the usual undergraduate subjects in the liberal arts, the specialized program is structured around chemistry. Of the required 120 units, 114 are didactic with the remaining 6 devoted to readings, conferences, and special topics including field trips.

Address all communications to:

Mr. Roamless Hudson, Jr.
Division of Natural Sciences
Saint Augustine's College
1315 Oakwood Avenue
Raleigh, North Carolina 27611

TEMPLE UNIVERSITY
Philadelphia, Pennsylvania

Grant Number: 1 T01 OH 00160-01

Program Title: Occupational Health Training Program

Degrees Offered: M.S. (Environmental Health)

Objectives: This program seeks to prepare professional level industrial hygienists trained in the recognition, evaluation and control of health problems in occupational environments.

Prerequisites: Candidates are accepted into the program who: (a) have science backgrounds with major study in chemistry and biology and (b) meet the admission requirements established by the Graduate Committee of Temple University School of Pharmacy.

Curriculum: This is a 12-month interdisciplinary program comprising two full semesters of lectures, demonstrations and laboratory work and a summer session devoted to field trips, meetings, and conferences. Although a thesis is not required, an acceptable research paper must be submitted as a graduation requirement.

<u>Standard Curriculum</u>	
<u>First Semester</u>	<u>Credits</u>
Industrial Hygiene I, Lecture & Laboratory	3
Fundamentals of Biostatistics	3
Toxicological Aspects of Industrial Hygiene I	3
Analytical Approaches to Industrial Hygiene, Lecture & Laboratory	3
Isotope Methodology, Lecture and Laboratory	4
Seminar	1
<u>Second Semester</u>	
Ventilation	2
Analytical Approaches to Industrial Hygiene II, Lecture & Laboratory	3
Administrative Aspects of Occupational Health	3
Environmental Toxicology, Lecture & Laboratory	3
Engineering Aspects of Air Pollution Control	2
Seminar	1

Field Trips - These are arranged to appropriate industrial locations in the greater Philadelphia area.

TEMPLE UNIVERSITY

Address all communications to:

Dr. Samuel Elkin
Temple University, School of Pharmacy
3223 N. Broad Street
Philadelphia, Pennsylvania 19140

TEXAS A&M UNIVERSITY
College Station, Texas

Grant Number: 1 T01 OH 00215-01

Program Title: Occupational Safety and Health Educational Programs

Degrees Offered: B.S., M.S., M.E. (Safety Engineering)

Objectives: This is a program to prepare professional level practitioners as well as teachers, researchers, and administrators of industrial hygiene, systems safety engineering, and occupational safety and health.

Prerequisites: Trainees for the bachelor's degree are selected on the basis of their grade point ratio, attitude and interest in occupational safety and health as determined during a personal interview. Candidates for the graduate program support must: (1) hold an acceptable baccalaureate or master's degree from a recognized institution; (2) show promise of ability to pursue advanced study and research; (3) have had adequate preparation to enter or continue graduate study in the field chosen; (4) submit acceptable G.R.E. scores; (5) have a satisfactory background and/or experience; (6) have acceptable references; (7) have a satisfactory personal interview.

Curriculum: The B.S. in Industrial Safety is approved by the Texas State Board of Control. The curriculum comprises 130 credit hours distributed as follows:

	<u>Credit Hours</u>
Mathematics and Basic Sciences	29
Engineering Science	23
Industrial Materials and Processes	19
Occupational Safety and Health	24
Humanities and Social Studies	27
Electives	8

Summer field experience is scheduled for junior and senior students in the B.S. program.

The graduate program offers a broad range of courses, with options, to enable students to obtain the M.E. and M.S. degrees through the Industrial Engineering Department (with a Safety Engineering option) and through the Engineering Technology Department. The M.S. (Industrial Safety option) and the M.S. (Industrial Hygiene option) are available.

TEXAS A&M UNIVERSITY

The master's curricula have individual core courses, are of 12-months duration, and provide for electives available from various departments of the colleges of the university such as, College of Engineering, College of Science, College of Veterinary Medicine, and College of Business Administration. The M.S. (Industrial Hygiene) and the M.S. (Industrial Safety) in the Engineering Technology Department both require a thesis and a final examination. The M.E. (Industrial Engineering) is a non-thesis program.

Address all communications to:

Dr. Ralph J. Vernon
Department of Industrial Engineering
Texas A&M University
College Station, Texas 77843

THE UNIVERSITY OF MICHIGAN
Ann Arbor, Michigan

Grant Number: 2 T01 OH 00037-11

Program Title: Graduate Professional Education in Industrial Health

Degrees Offered: M.S., M.P.H., Ph.D., Dr.P.H.

Objective: This program is directed toward the production of Industrial Hygienists and practitioners of Occupational Medicine. The trainees in the terminal M.S. program would be specialists in Industrial Hygiene, whereas those in the M.P.H. program would be post-M.D. physicians specializing in Industrial Health.

Prerequisites: Candidates for training would be recruited from among physicians, engineers, and post-baccalaureate students with physical and biological science backgrounds. Applicants must meet the scholastic requirements of the Horace H. Rackham School of Graduate Studies or the School of Public Health.

Curriculum: The program for either master's degree could be of one or two year duration. The M.P.H. degree program in Occupational Medicine is usually a two-year program, whereas the M.P.H. and M.S. degree programs in Industrial Hygiene are generally one-year programs for well-prepared, experienced students. Trainees who do not have experience in a field of public health or a year of acceptable graduate work require two years (five terms) for the master's degree. For all degree programs there is a central core of course offerings designed to provide a foundation in public health concepts and practices common to enlightened dealing with occupational safety and health problems. These courses include:

Public Health (including administration, environmental health, epidemiology, and other areas of public health)

Biostatistics

Industrial Hygiene

Industrial Hygiene Sampling and Analysis

Industrial Toxicology

Principles of Radiological Health

Principles of Environmental Health

Principles of Epidemiology

Additional courses and seminars are selected from a wide variety of offerings.

Address all communications to:

Dr. Ralph G. Smith
School of Public Health
The University of Michigan
Ann Arbor, Michigan 48104

THE UNIVERSITY OF MICHIGAN
Ann Arbor, Michigan

Grant Number: 5 T01 OH 00161-03

Program Title: Occupational Health and Safety Engineering

Degrees Offered: M.S., Ph.D.

Objectives: The program is designed primarily to prepare practitioners in occupational health and safety fields. A major aim is the provision of training for the prevention of occupationally unhealthy and unsafe working conditions. This is accomplished by preparing the trainees to be capable of designing desirable work situations within the limits imposed by man's physiological and anatomical capabilities.

Prerequisites: Trainees must hold a baccalaureate degree from a recognized program in engineering, physics, or a related field and give evidence of ability to pursue graduate studies in this field as judged by a five-man admissions committee. Some graduates in mathematics may be admitted to the program, if interested in the Systems Modeling and Operations Research topics.

Curriculum: A minimum of 30 credit hours is required for the master's degree in Industrial Engineering. The following division is recommended:

	Credits
Industrial Engineering	(min.) 16
Industrial Health	(min.) 7
Suggested electives	7

Required courses for all trainees include:

Environmental Physiology
Industrial Hygiene
Industrial Hygiene Control
Human Factors in Engineering Systems
Biomechanics and Work Physiology
Safety Engineering and Industrial Accident Prevention

A wide range of elective courses is available under the following and other categorical headings:

Occupational Health - Concepts and Controls
Human Performance and Safety Engineering
Seminar Topics in Occupational Health and Safety Engineering
Occupational Law
Insurance and Actuarial Science
Psychology

THE UNIVERSITY OF MICHIGAN

Sociology
Bioengineering
Physiology
Environmental Health
Anthropometry

Address all communications to:

Dr. Don B. Chaffin
The University of Michigan
2260 G. G. Brown Laboratory
Ann Arbor, Michigan 48105

UNIVERSITY OF ARIZONA
Tucson, Arizona

Grant Number: 1 T01 OH 00210-01

Program Title: Master of Science in Safety Management

Degrees Offered: M.S. (Safety Management)

Objective: The aim is to prepare broadly-based occupational safety and health Specialists equipped to function principally as safety engineers in high risk industries in the West.

Prerequisites: Accepted trainees must be holders of a bachelor's degree with a grade point average acceptable to the Graduate College of the University of Arizona. Each applicant accepted for a stipend is expected to have a minimum of two years of experience in safety or a related field.

Curriculum: The program comprises 30 hours of academic credit, 18 hours of which constitute the core curriculum. Twelve or more hours are in elective specialities.

<u>Core Courses</u>	<u>Credit Hours</u>
Measurement of Safety Performance	3
Safety Management	3
Safety Law	3
Human Factors Safety	3
Survey of Insurance	3
Occupational Health Hazards	3

<u>Representative Electives</u>	
Human Performance in Systems	3
Environmental Health	3
Mine Environment	2
Essentials of Toxicology	2
Theories of Hearing	3
Data Processing	3
Nuclear Safety	3

In addition to the two full semesters of didactic instruction, requirements include two five-week summer sessions. Research papers are integral requirements as are scheduled field trips to appropriate industrial and other related establishments.

Address all communications to:

Dr. Nestor R. Roos
Department of Finance
College of Business and Public Administration
University of Arizona
Tucson, Arizona 85721

UNIVERSITY OF CALIFORNIA
Berkeley, California

Grant Number: 5 T01 OH 00020-09

Program Title: Environmental Health

Degrees Offered: M.S., Ph.D. (Environmental Health), M.P.H.

Objectives: This program seeks the development of research oriented scientists in specialized areas of occupational health and industrial hygiene.

Prerequisites: Trainees are baccalaureate degree holders in a physical, biological, or applied science. Selection for admission is based on past academic performance, recommendations, research promise, and when possible, personal interview.

Curriculum: The curriculum is largely elective with but three required general courses, one in statistics, one in epidemiology, and a seminar in environmental health sciences. A dissertation is required for the doctoral degree.

Specific requirements for the M.S. degree:

1. Successful completion of prerequisites and required general courses as indicated above.
2. At least 12 quarter units of graduate study in Environmental Health Sciences.
3. At least 18 additional quarter units from selected courses.
4. A thesis is required for the degree.

Specific requirements for the Ph.D. degree:

1. Preparation equivalent to that outlined for the M.S. degree in item 1.
2. At least 15 quarter units of graduate study in Environmental Health Sciences to be completed during the first year of residence.
3. A program of study consisting of two minors to be undertaken prior to taking the Ph.D. qualifying examination.
4. The successful completion of the Ph.D. qualifying examination.
5. An acceptable doctoral dissertation and an open final examination.

UNIVERSITY OF CALIFORNIA

Address all communications to:

Dr. Robert C. Spear
School of Public Health
Earl Warren Hall
University of California
Berkeley, California 94720

UNIVERSITY OF CINCINNATI
Cincinnati, Ohio

Grant Number: 5 T01 OH 00028-07

Program Title: Training Program in Industrial Hygiene

Degrees Offered: M.S., Ph.D.

Objectives: The program is designed to develop capable professional industrial hygienists who will be able to evaluate and correct in-plant problems. Training is also provided at the doctoral level for those contemplating careers in research and/or teaching.

Prerequisites: Students are selected on the basis of past academic record, Graduate Record Examination scores, letters of recommendation, and when possible, personal interviews.

Curriculum:

Master's Degree-

- * Required for the degree are one year of residence and 45 quarter credits of course work. A research thesis is a requirement.

Doctoral Degree-

Three years of residence with 135 quarter credits are mandatory. A dissertation based on original research is a requirement.

- * Specialized skills in industrial hygiene are developed through specific courses, laboratory work, field trips, and guided research.

A partial listing of required and optional courses is as follows:

First Year

<u>Autumn Quarter</u>	<u>Credits</u>
* Environmental Health Seminar	1
* Environmental Hygiene Technology I	3
a* Introduction to Biostatistics	4
* Introduction to Occupational Health	1
a* Introductory Physiology and Biological Chemistry	4
Environmental Sanitation	2

UNIVERSITY OF CINCINNATI

Courses

<u>Autumn Quarter (continued)</u>	<u>Credits</u>
Environmental Hygiene Technology II	3
Radiobiology I	2
Radiation Health	2
Small Particle Technology	2
<u>Winter Quarter</u>	
* Environmental Health Seminar	1
* Environmental Hygiene Technology I	3
* Air Sampling and Analysis I	2
* Introduction to Toxicology	3
Radiation Health	2
Air Pollution Meteorology	4
Problems in Environmental Health	1
Environmental Sanitation	2
Epidemiology	3
Environmental Health Practice	2
Environmental Hygiene Technology II	3
Radiobiology II	2
<u>Spring Quarter</u>	
* Environmental Health Seminar	1
* Environmental Hygiene Technology I	3
* Air Sampling and Analysis II	2
* Industrial Ventilation	2
* Industrial Hygiene Laboratory	2
Physical Aspects of the Environment	1
Basic Principles of Industrial Safety Programs	1
Radiation Health Laboratory	2
Problems in Environmental Health	1
Environmental Health Practice	2
Toxicologic Aspects of the Environment	3
Environmental Hygiene Technology II	3
Radiobiology III	2
<u>Summer Quarter</u>	
Master's Thesis Research	Variable

*Required courses. Sufficient credits for a full program are selected from other courses listed as suggested electives. Other courses may be elected with the consent of the advisor.

a) May be waived with the permission of the advisor and the instructor.

UNIVERSITY OF CINCINNATI

Courses

Second Year

<u>Autumn Quarter</u>	<u>Credits</u>
** Environmental Health Seminar	1
** Instrumental Methods of Analysis of Air Pollutants I	2
** Environmental Hygiene Technology II	3
** Water Pollution Control	3
Environmental Health Practice	2
Occupational Dermatology	1.5
<u>Winter Quarter</u>	
** Environmental Health Seminar	1
** Instrumental Methods of Analysis of Air Pollutants II	2
** Environmental Hygiene Technology II	3
** Problems in Environmental Health	1
** Air Pollution Meteorology	4
Industrial Psychology	1.5
Environmental Health Practice	2
Regression Analysis	4
Occupational Dermatology	1.5
<u>Spring Quarter</u>	
** Environmental Health Seminar	1
** Instrumental Methods of Analysis of Air Pollutants III	2
** Environmental Hygiene Technology II	3
** Problems in Environmental Health	1
** Water Pollution Control	3
Environmental Health Practice	2
Theory and Application of Aerosol Technology	2
Design of Environmental Quality Monitoring Program	2
Experimental Design	4
Fuels and Fuel Technology	2

Summer Quarter

Master's Thesis Research	Variable
Doctoral Dissertation Research	Variable

** Required for second year unless previously taken. Other courses may be elected with the consent of the faculty advisor.

Ph.D. candidates may schedule reading courses in a modern language to prepare for degree requirements.

UNIVERSITY OF CINCINNATI

Address all communications to:

Dr. Bernard E. Saltzman
University of Cincinnati
Kettering Laboratory
3223 Eden Avenue
Cincinnati, Ohio 45267

UNIVERSITY OF CINCINNATI
Cincinnati, Ohio

Grant Number: 5 T01 OH 00129-05

Program Title: Industrial Psychiatry

Degrees Offered: No degree, post-residency training (Industrial Psychiatry and/or Occupational Medicine)

Objectives: This is a training program in the field of industrial mental health which is designed to provide psychiatric specialists in occupationally related emotional disorders and occupational medical specialists with the skills and knowledge to recognize and to deal with mental health problems in the work environment. Graduates of this program are qualified for teaching of industrial psychiatry, conduct of research, and for practice, including service with industry or governmental agencies.

Prerequisites: Trainees are selected from among 1st and 2nd year post-residency psychiatrists and physicians-in-training in occupational medicine.

Curriculum: This is a program in the Department of Psychiatry of the University of Cincinnati College of Medicine with strong support from the Department of Environmental Health especially in didactic offerings. A concurrent research program is planned to be included as part of the training.

The trainees, designated "fellows", are expected to pursue the general curricular patterns as follows:

- A. For Fellows in Industrial Psychiatry (1st and 2nd year post-psychiatric residency)
 1. Attendance at selected courses in Occupational Medicine in the Institute of Environmental Health.
 2. Supervised work (psychiatric and occupational medical) in early case finding, consultation, and research in community psychiatry as applied to Occupational Medical and Personnel Departments.
- B. For Fellows in Occupational Medicine (supported in the training programs of the Institute of Environmental Health)

Attendance is required at a lecture-discussion course with the psychiatrists and a clinical conference course in psychiatric aspects of occupational health with tandem teaching by a psychiatrist and an occupational physician.

UNIVERSITY OF CINCINNATI

Address all communications to:

Dr. W. Donald Ross
University of Cincinnati
College of Medicine
Department of Psychiatry
Medical Sciences Building, Room 7209
231 Bethesda Avenue
Cincinnati, Ohio 45267

UNIVERSITY OF MIAMI
Coral Gables, Florida

Grant Number: 1 T01 OH 07012-01

Program Title: Occupational Safety and Health Training

Degrees Offered: B.S.; Post-baccalaureate Certificate of Proficiency

Objectives: This is a bipartite program designed to meet both the immediate and long-term needs of agriculture, industry, insurance, and government for trained practitioners of occupational safety and health. Agricultural worker's safety and health is emphasized. Special efforts are made to recruit trainees from minority groups.

Prerequisites: Baccalaureate level students must meet the admission requirements of the Industrial Engineering Department which is a grade of "C" in high school courses, or present an Associate of Arts degree with a minimum "C" average. Candidates for the certificate program must present at least one of the following:

1. Baccalaureate degree in a recognized field of engineering, health-related fields, basic sciences, or the equivalent.
2. Registration as a professional engineer or as a certified safety professional.
3. Presentation of evidence to the satisfaction of the Department of Industrial Engineering of an adequate background in Occupational Safety and Health.

Curriculum: For the baccalaureate program, the requirements include the basic minimum undergraduate subjects in the humanities and a minimum of 20 semester hours in specialized occupational safety and health courses. Among these are the following:

	<u>Credits</u>
Industrial Security	3
Industrial Safety Engineering	3
Product Safety Engineering	3
Accident Prevention Systems	3
Man-Machine Systems	3
Industrial Hygiene	3
Industrial Toxicology	3

UNIVERSITY OF MIAMI

In addition, a project is required, in a selected option, in all courses requiring projects. These courses are:

Methods Engineering
Manpower Systems
Production Systems
Systems Analysis Applications

The Certificate Program requires completion of a minimum of 15 semester hours of individually planned advanced course work of which at least 12 hours are directly related to occupational safety and health. Some suggested courses are the following:

Accident Prevention Systems
Occupational Biomechanics
Industrial Hygiene
Industrial Toxicology
Biostatistics Methods
Elements of Environmental Health
Product Safety Engineering
Design of Experiments

Address all communications to:

Dr. Tarek M. Khalil
Department of Industrial Engineering
School of Engineering and Environmental Design
University of Miami
Box 8294
Coral Gables, Florida 33124

UNIVERSITY OF MINNESOTA
Minneapolis, Minnesota

Grant Number: 2 T01 OH 00135-04

Program Title: Occupational Health

Degrees Offered: M.S., M.P.H., Ph.D.

Objectives: This program is designed to train environmental health specialists in occupational health, industrial safety, particle technology, and risk management. The training is directed primarily to service but also is applicable to teaching and research. Cooperative activities are established with the College of Agriculture, Institute of Technology, School of Business Administration, School of Medicine and University Health Service of the University as well as with the State Employee Health Service.

Prerequisites: Trainees must be of post-baccalaureate level with degrees in engineering, physical sciences, or biological sciences; or persons with appropriate experience in industrial safety or public health who desire deeper involvement in occupational health and safety.

Curriculum: Three options are available for the master's degree level. For the M.S. degree, Plan A involves research and a thesis whereas Plan B involves three papers of the quality but not range of the M.S. thesis. For the M.P.H. degree, the candidate who is admitted to the School of Public Health, is required to submit three papers similar to those required for Plan B; but there is no research or thesis provision in this program. The minimum time required for the M.P.H. degree or M.S. (Plan B) degree is 11 months. The M.S. (Plan A) program normally is of 18-24 months duration. The Ph.D. program requires a minimum period of three years. Research and a dissertation are also required.

A typical curriculum for the master's degree would include the listed courses below. For the Ph.D. degree, in addition to these listed courses, all the core environmental health courses are required, as are additional courses of environmental significance in other branches of the University.

<u>Core Courses</u>	<u>Credits</u>
Biological Basis of Health and Disease	3
Environmental Health	4
Epidemiology I	3
Biometric Methods in Public Health	6
Seminar - Environmental Health	1
Agency Experience	5

UNIVERSITY OF MINNESOTA

<u>Specialty Courses</u>	<u>Credits</u>
Industrial Hygiene Engineering	4
Air Analysis	6
Ventilation Control of Environmental Hazards	3
Public Health Aspects of Toxic Products	2
Measurement of Ionizing Radiation	4
Environmental Toxicology	3
Particle Technology (Mechanical Engineering)	8
Occupational Safety (Industrial Engineering)	3
Noise and Man	3
Medical Aspects of Occupational Health	3
<u>Elective Courses</u>	
Industrial Ventilation (Mechanical Engineering)	3
Agricultural Occupational Health	3
Health Survey of Manufacturing Processes	2
Field Problems in Occupational Health	3
Research in Occupational Health	Credit Arranged
Research in Injury Control	Credit Arranged
Introduction to Air Pollution Problems	3
Air Pollution Controls and Surveys	3

Address all communications to:

Mr. Knowlton J. Caplan
Associate Professor, Environmental Health
University of Minnesota
School of Public Health
1325 Mayo Memorial Building
Minneapolis, Minnesota 55455

UNIVERSITY OF NORTH CAROLINA
Chapel Hill, North Carolina

Grant Number: 2 T01 OH 00099-06

Program Title: Occupational Health Training

Degrees Offered: M.S.P.H. (Public Health), M.S.S.E. (Sanitary Engineering), Ph.D.

Objectives: This is a graduate program which seeks to train practitioners of industrial hygiene, primarily at the master's degree level. The training which is essentially practical, is broadly based, including work in biostatistics, epidemiology, radiological health, environmental sanitation, and many aspects of air pollution control.

Prerequisites: Trainees are sought from among holders of baccalaureate (or higher) degrees in engineering, chemistry, biology, or any physical or natural science, and among doctors of medicine. Mathematics through the calculus and an academic average of B is required, although some variance is permitted from the latter, in some cases. A statement of research interests and professional goals is required.

Curriculum: The program crosses disciplinary lines as well as institutional lines, in that students who may be enrolled in the Institute for Environmental Health Studies (of the University of North Carolina) may be permitted to take courses such as agriculture, forestry (meteorology), and chemical engineering (which are not available at Chapel Hill) at Duke University and/or North Carolina State University.

Although the formal course requirements of the School of Public Health and the Department of Environmental Sciences and Engineering are minimal, the master's degree program generally takes one or two years. The programs generally follow typical patterns. The one-year program generally includes two semesters plus a summer session, for a total of about 42 credits. The two-year program generally includes four semesters plus a summer session, for a total of about 72 credits. The course work typically includes among a wide selection:

Statistics and Probability
Epidemiology
Applied Physiology and Toxicology
Air Pollution Control
Elements of Radiological Health
Instrumental Methods of Analysis
Chemistry of the Troposphere
Applied Electron Microscopy

UNIVERSITY OF NORTH CAROLINA

Industrial Medicine
Special Problems in Industrial Hygiene
Physiology & Toxicology

A research project and report are required at the master's level and opportunities are provided for field experience.

Address all communications to:

Dr. David A. Fraser
University of North Carolina
Department of Environmental Sciences
and Engineering
Chapel Hill, North Carolina 27514

UNIVERSITY OF NORTH CAROLINA
Chapel Hill, North Carolina

Grant Number: 5 T01 OH 00145-03

Program Title: Occupational Health Nursing

Degrees Offered: M.P.H., M.S.

Objectives: This is a graduate program that seeks to prepare experienced occupational health nurses for advanced positions of administrator, consultant, supervisor, or teacher in occupational health nursing.

Prerequisites: Recruitment is directed toward experienced occupational health nurses holding a baccalaureate degree with an average grade of B or better.

Curriculum: Two programs of study are offered. One program, leading to an M.P.H. degree, is 11-1/2 months in duration and prepares experienced occupational health nurses for positions in administration, consultation, or supervision. The second program, leading to an M.S. degree, is two academic years in duration and prepares experienced occupational health nurses for teaching positions.

In addition to the core courses required for the M.P.H. or M.S. degree, five occupational health nursing courses are available. Four are required courses and one is an elective. Three additional occupational health courses are required. These are: Applied Physiology and Toxicology, Industrial Hygiene Practices, and Occupational Safety.

All students are required to do an independent study culminating in a major paper for the M.P.H. degree and a thesis for the M.S. degree.

Illustrative Program of Study Leading
to an M.P.H. Degree with Specialization
in Occupational Health Nursing

<u>Fall Semester</u>		<u>Credits</u>
PUB 100	Ecology of Human Health	3
BIOS 100	Public Health Statistics	3
EPID 162	Epidemiology in Environmental Health	3
ENVR 143	Applied Physiology and Toxicology	3
PHNU 181	Occupational Health Nursing I	3

UNIVERSITY OF NORTH CAROLINA

Spring Semester

Credits

PHNU 281	Occupational Health Nursing II	3
ENVR 242	Industrial Hygiene Practices	3
ENVR 240	Occupational Safety	2
BA 150	Organizational Behavior*	3
PHNU 299	Research Methods in Public Health Nursing*	3
PHNU 180	Readings in Occupational Health Nursing (1 or more)*	1

Summer Session

PHNU 282	Problems in Occupational Health Nursing (research project or independent study)	3
PHNU 381	Advanced Practice in Occupational Health Nursing (field experience)	3
MENH 255	Consultation: A Public Health Method*	<u>2</u>

Total Credits 38

*Suggested electives. A rich variety of electives are available on campus or through the North Carolina State University or Duke University.

UNIVERSITY OF NORTH CAROLINA
Chapel Hill, North Carolina

Grant Number: 1 T01 OH 07035-01

Program Title: Biostatistical Training in Occupational Health

Degrees Offered: M.S.P.H., M.S., Ph.D., Dr.P.H.

Objectives: This program seeks to prepare biostatisticians to conduct research in occupational health and to provide professional statistical support to industrial hygienists, epidemiologists, and other professionals in occupational health.

Prerequisites: Candidates at the predoctoral level are holders of the bachelor's degree with good undergraduate records, competence in mathematics through the calculus, and preferably with some experience and/or education in environmental health. At the doctoral level, the candidate's background preparation may be in one or more of a number of areas such as: toxicology, pharmacology, biochemistry, industrial hygiene, biophysics, occupational medicine, epidemiology, engineering, mathematics, among others.

Curriculum: The curriculum operates at four levels:

The Master of Science in Public Health (M.S.P.H.) program emphasizes basic statistical and occupational health skills and knowledge usually required in any operating agency statistician who directs several intermediate level or junior level statisticians in programs of data analysis and/or quality control. This program normally requires two semesters of course work and related research experience plus 10 weeks of field training in an operating agency.

The Master of Science (M.S.) program provides more intensive concentration in statistics than the M.S.P.H. program. It is more research oriented. This program normally requires three semesters of course work, associated research experience, plus one summer of field experience or consultation training.

The doctoral and postdoctoral programs are directed to preparing statisticians for high-level research positions or posts involving the application of statistics to occupational health problems with the development of new methodology, as required. A dissertation is required at the doctoral level. This program generally requires 2 to 3 years for the completion of the necessary course work, with about 4 years required for completion of the degree requirements.

UNIVERSITY OF NORTH CAROLINA

Specifically, at the master's level, the course work distribution includes: biostatistics, epidemiology, environmental health, industrial hygiene, supervised consulting, field experience. At the doctoral level, the course work includes all of the aforementioned plus greater emphasis on research, theory, and development of new methodology for research problems in occupational health.

Address all communications to:

Dr. Michael J. Symons
Department of Biostatistics
School of Public Health
University of North Carolina
Chapel Hill, North Carolina 27514

UNIVERSITY OF PITTSBURGH
Pittsburgh, Pennsylvania

Grant Number: 5 T01 OH 00118-05

Program Title: Acoustic Environmental Control

Degrees Offered: M.S., Sc.D. (Hygiene)

Objectives: This program is directed toward training full professional level specialists who will be qualified to cope with health problems generated by the impact of acoustic stimuli in industry, housing, transportation, schools, hospitals, and the community at large.

Prerequisites: Trainees are recruited from among baccalaureate degree holders with backgrounds in the arts, sciences, or engineering. Adequate preparation in chemistry, physics, biology, and mathematics, especially beyond differential equations, is a requisite.

Curriculum: The course of instruction in the Graduate School of Public Health is patterned after that required for the degree of Doctor of Philosophy. The minimum residence requirement is six terms of full-time study. A doctoral dissertation with a final oral examination and defense of thesis are required for the degree. The emphasis in the program is on professional rather than research training. Breadth of training and the combining of noise control technology with public health, urban planning, and health law denote the unique character of the program.

Some representative courses in the curriculum include:

Health Law
Seminar Series on Planning and Control of
the Acoustic Environment
Acoustics of Speech
Dynamical Analogies
Traveling Wave Theory
Epidemiology
Effects of Noise on Man
Backgrounds, Administrative Principles and
Basic Issues in Public Health
Introduction to Sound Stimuli and Auditory Functioning

Address all communications to:

Mr. Kenneth C. Stewart
Graduate School of Public Health
University of Pittsburgh
130 DeSoto Street
Pittsburgh, Pennsylvania 15261

UNIVERSITY OF PITTSBURGH
Pittsburgh, Pennsylvania

Grant Number: 5 T01 OH 00137-04

Program Title: Training Program in Industrial Biostatistics

Degrees Offered: M.S., Ph.D.

Objectives: This program is designed to amplify and extend the ongoing master's degree level program in industrial biostatistics to the doctoral level so as to produce statisticians qualified for work in government and industry in evaluating the effects of various dusts, vapors, chemicals, noise, light, and heat on the health of employees. Particular emphasis is placed on development and analysis of data upon which threshold limits can be based, and upon long-term health effects.

Prerequisites: Trainees are sought from among master's level biostatisticians or baccalaureate level students qualified to pursue advanced graduate work. Students' backgrounds include medicine, nursing, mathematics, statistics, and biology. Miller Analogies or the Graduate Record Examination results are used to screen applicants. A grade point average of at least 2.5 with high grades in mathematics are required.

Curriculum: The course of study normally is of four-years' duration for students entering at the baccalaureate level. During the first 2 years, training is largely didactic, with the student accumulating approximately 72 semester credits. Comprehensive examinations are given during the third year. The final year is devoted to research and the completion of a dissertation. A field experience of some 3-6 months' duration is arranged, at the end of the second year, so that the student may work on some current industrial health problem. This field experience which is Health or some other state or federal agency, may lead to the research for the dissertation.

A typical program of study includes courses in:

	<u>Credits</u>
Statistics and Computer Science	37
Epidemiology	6
Public Health	8
Occupational Health	21

Address all communications to:

Dr. Philip E. Enterline
Graduate School of Public Health
University of Pittsburgh
130 DeSoto Street
Pittsburgh, Pennsylvania 15261

UNIVERSITY OF PITTSBURGH
Pittsburgh, Pennsylvania

Grant Number: 1 T01 OH 00214-01

Program Title: Industrial Hygiene Training Grant

Degrees Offered: M.S. (Industrial Hygiene)

Objectives: The principal aim of the program is to prepare industrial hygiene practitioners who will be capable of:

1. assessment and evaluation of chemical and physical hazards in the work environment, and
2. recommending engineering design to control hazards and to provide a salubrious work environment.

Prerequisites: Trainees are recruited from holders of the bachelor's degree in a physical or biological science or a branch of engineering. Admission to the program is based on G.R.E. scores, undergraduate record, letters of recommendation, and statement of intent.

Curriculum: The full program comprises eleven calendar months of instruction (two terms plus a summer session). Required courses include one or more in statistics, experimental design, epidemiology, occupational health, work physiology, industrial hygiene, ventilation, toxicology, industrial medicine, and radiation health. These total 25 credit hours, with 4 more in proposed courses in law and safety. A variety of electives is available, with an overall total of 40 to 45 credits expected for graduation. Field trips are included in the training and a thesis must be completed.

Address all communications to:

Dr. Morton Corn
Graduate School of Public Health
University of Pittsburgh
130 DeSoto Street
Pittsburgh, Pennsylvania 15261

WICHITA STATE UNIVERSITY
Wichita, Kansas

Grant Number: 1 A14 OH 00006-01

Program Title: Short-Term Intensive Training in Occupational Safety and Health

Degrees Offered: None

Objectives: This is a program of three sessions, each of eight weeks duration, during which intensive specialized instruction is to be offered in recognition, evaluation, and control of health hazards and to a lesser degree, safety hazards. Subject areas include physical stresses, chemical and biological stresses, ergonomics, and control measures. The program comprises lectures/demonstrations and field trips. Academic as well as continuing education credit may be obtained by the course participants. The training is designed to enhance the skills and knowledge of practitioners and teachers of occupational safety and health subjects.

Address all communications to:

Dr. Everett L. De Whitt, Jr.
Division of Continuing Education
Wichita State University
1845 North Fairmount
Wichita, Kansas 67208

TRAINING GRANTS IN FISCAL YEAR 1975

<u>GRANT NUMBER</u>	<u>INSTITUTION AND PROGRAM DIRECTOR</u>	<u>PROJECT PERIOD</u>	<u>FY 1975 AWARD</u>
A14 OH 00006	Wichita State Univ. DeWhitt, E.L., Jr.	07/01/75-06/30/76	\$159,000
A14 OH 00007	Ohio Dept. of Health Benning, D.	07/01/75-06/30/76	26,350
T01 OH 00020	Univ. of California Spear, R.C.	07/01/71-12/31/76	-0-
T01 OH 00024	Kansas State Univ. Rohles, F.H., Jr.	07/01/72-06/30/76	-0-
T01 OH 00028	Univ. of Cincinnati Saltzman, B.E.	07/01/71-06/30/76	86,337
T01 OH 00037	The Univ. of Michigan Smith, R.G.	07/01/75-06/30/78	94,594
T01 OH 00089	North Carolina St. Univ. Pearson, R.G.	07/01/75-06/30/78	41,600
T01 OH 00099	Univ. of North Carolina Fraser, D.A.	07/01/75-06/30/80	29,668
T01 OH 00103	New York University Tichauer, E.R.	07/01/70-01/31/76	-0-
T01 OH 00118	Univ. of Pittsburgh Stewart, K.C.	07/01/70-06/30/76	-0-
T01 OH 00129	Univ. of Cincinnati Ross, W.D.	07/01/70-06/30/76	8,021
T01 OH 00135	Univ. of Minnesota Caplan, K.J.	07/01/75-06/30/80	85,571
T01 OH 00137	Univ. of Pittsburgh Enterline, P.E.	07/01/71-06/30/76	-0-
T01 OH 00145	Univ. of North Carolina	07/01/72-06/30/76	-0-
T01 OH 00160	Temple University Elkin, S.	07/01/75-06/30/80	64,487
T01 OH 00161	The Univ. of Michigan Chaffin, D.B.	07/01/72-06/30/76	71,191

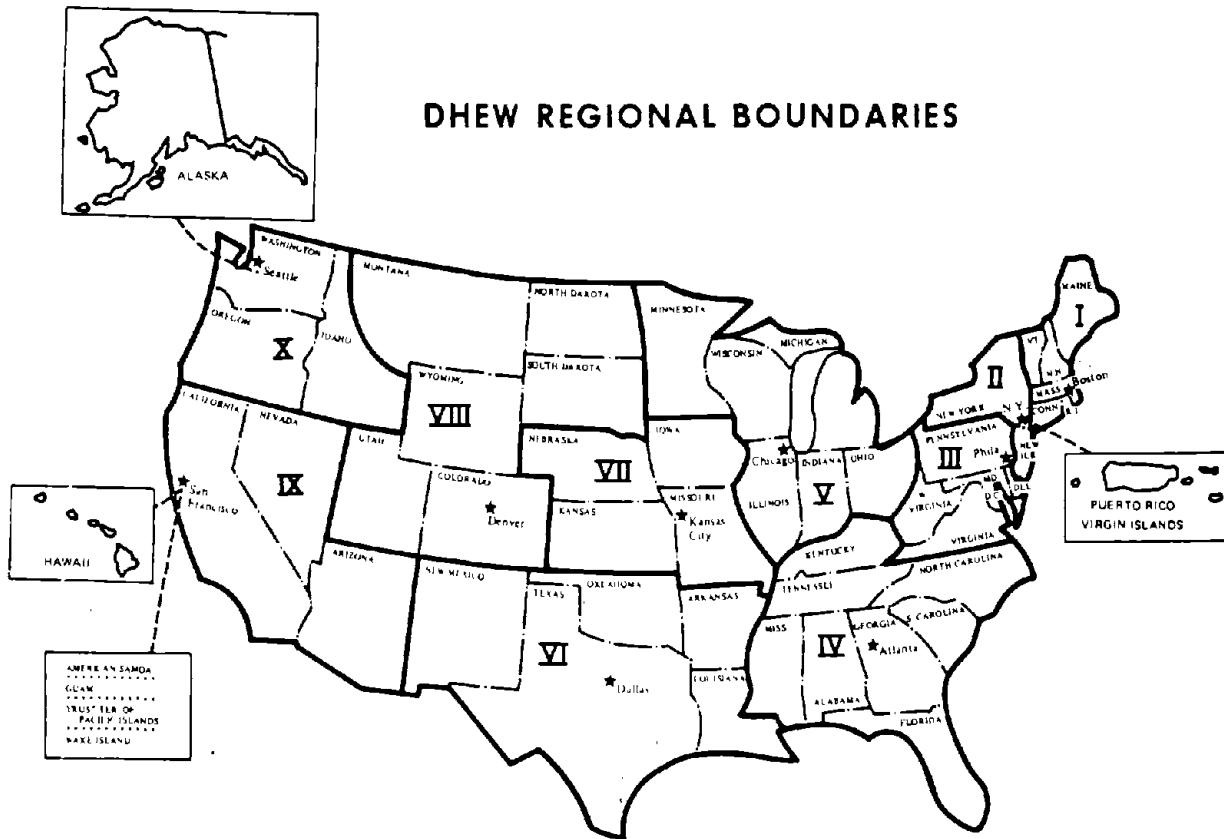
<u>GRANT NUMBER</u>	<u>INSTITUTION AND PROGRAM DIRECTOR</u>	<u>PROJECT PERIOD</u>	<u>FY 1975 AWARD</u>
T01 OH 00162	Auburn University Brooks, G.H.	07/01/75-06/30/78	\$ 32,701
T01 OH 00163	New York University Grimaldi, J.V.	07/01/71-06/30/76	-0-
T01 OH 00205	Ferris State College Allen, R.W.	07/01/75-06/30/80	26,982
T01 OH 00210	University of Arizona Roos, N.R.	07/01/75-06/30/78	119,819
T01 OH 00214	Univ. of Pittsburgh Corn, M.	07/01/75-06/30/80	108,220
T01 OH 00215	Texas A&M University Vernon, R.J.	07/01/75-06/30/78	59,455
T01 OH 00217	Oklahoma State Univ. Janes, D.F.	07/01/75-06/30/78	61,092
T01 OH 00219	Mt. Sinai School of Medicine, CUNY Selikoff, I.J.	07/01/75-06/30/78	105,384
T01 OH 00223	Marshall University Mills, M.D.	07/01/75-06/30/77	38,586
T01 OH 00225	St. Augustine's College Hudson, R., Jr.	07/01/75-06/30/80	74,500
T01 OH 00235	Clemson University Lyons, D.W.	07/01/74-06/30/76	-0-
T02 OH 07003	Montana College of Min. Science & Tech. Bossard, F.C.	07/01/75-06/30/80	16,426
T01 OH 07006	California State Univ. Kelly, D.L.	07/01/75-06/30/80	51,195
T01 OH 07012	Univ. of Miami Khalil, T. M.	07/01/75-06/30/78	53,540
T02 OH 07013	N. Va. Comm. College Paullin, A.K.	07/01/75-06/30/78	45,302
T01 OH 07014	Harvard University Burgess, W.A.	07/01/75-06/30/80	67,634

<u>GRANT NUMBER</u>	<u>INSTITUTION AND PROGRAM DIRECTOR</u>	<u>PROJECT PERIOD</u>	<u>FY 1975 AWARD</u>
T02 OH 07026	Catonsville Comm. Coll. Valentino, F.A.	07/01/75-06/30/80	\$ 54,184
T02 OH 07028	New York University Courtenay, I.D.	07/01/75-06/30/78	127,255
T01 OH 07035	Univ. of North Carolina Symons, M.J.	07/01/75-06/30/80	67,638
T02 OH 07037	Kirkwood Comm. College Kort, H.B.	07/01/75-06/30/76	25,790
T02 OH 07038	Housatonic Comm. College Cooper, R.B.	07/01/75-06/30/78	62,538
T01 OH 07039	Colorado State Univ. Buchan, R.M.	07/01/75-06/30/77	20,104
T02 OH 07041	Quinnipiac College Adess, M.L.	07/01/75-06/30/77	114,836

TRAINING GRANTS DISTRIBUTION BY STATES

<u>STATE</u>	<u>NUMBER OF INSTITUTIONS</u>	<u>NUMBER OF GRANTS</u>	<u>AMOUNT</u>
Alabama	1	1	\$ 32,701
Arizona	1	1	119,819
California	2	2	51,195
Colorado	1	1	20,104
Connecticut	2	2	177,374
Florida	1	1	53,540
Iowa	1	1	25,790
Kansas	2	2	159,000
Maryland	1	1	54,184
Massachusetts	1	1	67,634
Michigan	2	3	192,767
Minnesota	1	1	85,571
Montana	1	1	16,426
New York	2	4	232,639
North Carolina	3	5	213,406
Ohio	2	3	120,708
Oklahoma	1	1	61,092
Pennsylvania	2	4	172,707
South Carolina	1	1	-0-
Texas	1	1	59,455
Virginia	1	1	45,302
West Virginia	1	1	38,586

TRAINING GRANTS DISTRIBUTION BY REGION



<u>Region</u>	<u>Number of Grants</u>	<u>Total Amount</u>
I	3	\$ 245,008
II	4	232,639
III	7	310,779
IV	8	299,647
V	7	399,046
VI	2	120,547
VII	3	184,790
VIII	2	36,530
IX	3	171,014
X	0	-0-