


April 26, 2017

TO: Members of the Board of Trustees 
FROM: Jeremy Teitelbaum, Interim Provost
RE: Graduate Certificate in Addiction Science

RECOMMENDATION:

That the Board of Trustees approve the Graduate Certificate in Addiction Science.

BACKGROUND:

The Graduate Certificate in Addiction Science is intended for graduate students and post-doctoral fellows in the health professions. The certificate program was funded in August 2016 by the National Institute on Alcohol Abuse and Alcoholism as an R25 grant. The courses are designed to promote basic, clinical, epidemiological and policy research on alcohol and other substances by a wide array of health professionals, including current practitioners or researchers and those in training for health professions. The courses were developed around the theme of alcohol and addiction studies and are designed to educate scientists, educators, service providers, and others about how to conduct scientific research on alcohol and other drug use disorders. The courses examine the multiple aspects of addiction research as they relate to the broad area of public health. The certificate will culminate in identified student competencies and may also lead to the qualifications for a degree in recognized fields of study, such as medicine, psychology, social work, nursing, or allied health. Students must successfully complete each of four 3-credit courses in order to be awarded the certificate.

The pre-requisites for admission to the certificate program will be similar to those for admission to Masters in Public Health (MPH) programs, i.e., either a professional degree in medicine or a social science, or a bachelor's degree in an area related to public health. Although no prior experience with or knowledge of alcohol and addiction studies is required for any of the courses, prior training or experience in health-related research or clinical services will be required.

Most students enrolled in the Certificate program will be current UConn students from various graduate programs; these students will pay no additional tuition or fees. Students only enrolled in the Certificate program will pay the applicable non-degree costs per course.

Request for New UConn Certificate Program

Program information

Name of certificate program:	Certificate in Addiction Science
Name of sponsoring department(s):	Department of Community Medicine and Health Care
Name of Department Head:	Thomas F. Babor
Name of sponsoring School:	School of Medicine
Director of certificate program:	Thomas F. Babor, Department Chair E-mail address: babor@uchc.edu Phone number: 860.679.5494
Type of certificate:	Graduate, Online
CIP Code:	51.2207 (Public Health Education and Promotion)
Anticipated start date:	2017
Anticipated date of first graduation:	May, 2018
Projected annual enrollments:	4 courses per academic year with 15 students per course (2 courses offered academic year of 2017-2018)

Program outline and description of program learning outcomes

Describe why this certificate program is needed and the target audience it is expected to serve. Include the results of market and competitive analyses.

The Certificate in Addiction Science is an addiction research certificate intended for graduate students and post-doctoral fellows in the health professions. The certificate program was funded in August 2016 by the National Institute on Alcohol Abuse and Alcoholism as an R25 grant. The courses are designed to promote basic, clinical, epidemiological and policy research on alcohol and other substances by a wide array of health professionals, including current practitioners or researchers and those in training for health professions. The courses were developed around the theme of alcohol and addiction studies and are designed to educate scientists, educators, service providers, and others about how to conduct scientific research on alcohol and other drug use disorders. The courses examine the multiple aspects of addiction research as they relate to the broad area of public health. The certificate will culminate in identified student competencies and may also lead to the qualifications for a degree in recognized fields of study, such as medicine, psychology, social work, nursing, or allied health. Students must successfully complete each of four 3-credit courses in order to be awarded the certificate.

The rationale for the selection of these particular courses is based on several assumptions. First, research training in alcohol and the addictions is typically done at the post-doctoral level in highly specialized addiction research centers or informally by scientists trained in other disciplines or in clinical settings. To the extent that alcohol and addiction science is highly interdisciplinary and much of the research is increasingly being conducted in interdisciplinary teams, it is important to train scientists broadly in the methods and theories of multiple disciplines. Second, the inclusion of the research integrity course as a required part of the sequence is a very important part of the socialization of a scientist into a career direction that heretofore has been unknown to most basic, clinical and social scientists. Third, the courses on basic, clinical and policy research cover the major areas funded by the NIH institutes concerned with alcohol, tobacco and other drugs. These courses should not only prepare the program participants for the job market in these areas, but also inform them of the opportunities for collaboration with investigators working in other areas of addiction science, and make them more competitive as grant applicants.

As noted previously, the rationale for a broader focus on both alcohol and other addiction research is to attract a broad spectrum of trainees, and train researchers to approach alcohol-related and drug-related problems in ways they are likely to encounter them in the real world, i.e., as part of a spectrum of substance use disorders in terms of etiology, prevention, treatment and policy. The program is designed to be a freestanding set of courses whose primary target audience is students pursuing post-baccalaureate academic degrees and individuals in the professional workforce in medicine, nursing, social work, law, psychology, sociology, and other fields related to addiction science. As such, the courses will include a mix of students from a broad spectrum of academic disciplines, programs and cultures that reflect the diversity of the field.

The education and/or career levels of the planned participants are at the graduate level (masters and doctoral) and postdoctoral level (postdoctoral research fellows, psychiatric residents, psychology interns). More specifically, the expected participants are graduate students in public health (N=150), medicine (N=300), dentistry (N=100), social work, nursing and allied health, as well as Psychiatric Residents and Post-doctoral fellows in the UConn T32 research training program (N=6). This pool of applicants can be conservatively estimated at approximately 600. Eligibility and specific educational background characteristics that are essential for participation in the proposed research education program include a bachelor degree from an accredited university and prior training or experience in health-related research or clinical services.

The number of people working in addiction research, treatment, prevention and policy varies from one country to another (World Health Organization, 2010). The size of the workforce in a particular country depends on the extent of addiction-related problems, the delegation of professional responsibilities, and the funding provided by governments to manage the problems of addiction. It has been estimated that in the research sector alone there is now a complex network of perhaps 10,000 people worldwide who identify addiction science as part of their career identity (Babor, 2012). Membership in the 15 largest addiction research societies, which include both basic and clinical scientists,

exceeds 20,000 persons worldwide. The number of addiction specialists involved in the delivery of treatment and prevention services is much larger, representing as many as 200,000 professionals in the fields of counselling, addiction psychiatry, social work, nursing, psychology, sociology, public health and related academic disciplines. This suggests that the market for training in addiction science is large and is likely to expand further in the future

Describe the educational prerequisites (and professional prerequisites, if appropriate) required of students for admission to this program.

The pre-requisites for admission to the certificate program will be similar to those for admission to Masters in Public Health (MPH) programs, i.e., either a professional degree in medicine or a social science, or a bachelor's degree in an area related to public health. Although no prior experience with or knowledge of alcohol and addiction studies is required for any of the courses, prior training or experience in health-related research or clinical services will be required. Prior coursework in statistics, epidemiology and research methods will be preferred. Students without such prior coursework or experience must take the Epidemiology of Substance Use course (to be offered each Fall) prior to taking the other three certificate courses. Successful candidates for admission should meet the recommended 3.0 or higher cumulative GPA. Students applying using the results from the Test of English as a Foreign Language (TOEFL) must have a minimum overall score of 550 for the paper-based test or 79 for the internet-based test. This certificate program will have its own Admission Committee. The Admission Committee members will be Thomas Babor, Kerry-Ann Stewart, Katherine Robaina, and Jonathan Noel. Current matriculated MPH students are encouraged to apply.

Describe similar programs nationally, regionally, or in CT.

Recently, degrees in addiction studies have begun to be offered by institutions of higher learning around the world. These degree programs are often interdisciplinary, involving training in genetics, neuroscience, psychology, epidemiology and public health. They are directed at a variety of individuals interested in improving their clinical skills, research methods and professional qualifications for positions in research, clinical services, prevention and policy. In a concept paper prepared by the PI/PD for the International Confederation of ATOD Research Associations, over 20 academic programs were identified, including programs at the following American universities: Virginia Commonwealth University, the Hazelton Graduate School in Minnesota, Lewis and Clark Graduate School of Education and Counselling in Oregon, University of South Dakota, International University for Graduate Studies in New York, and Boise State University. In addition to these degree programs, there are many post-baccalaureate programs that provide training to addiction professionals in public health, social science, and addiction medicine. Even more numerous are training programs and workshops that provide specialized courses in continuing education. To our knowledge, no certificate programs or concentrations within graduate degree programs have been established within the more than 200 Schools of Public Health and Programs in Public Health recognized by Association of Schools of Public Health (ASPPH) and the Council on Education in Public Health (CEPH). The current program will be the first certificate in a public health program, and will serve as the basis for the training

of public health professionals as well as those in other health professions who are increasingly migrating to public health for interdisciplinary training opportunities.

Describe the program learning outcomes.

The purpose of the certificate program is to expand students' knowledge and competencies in multiple aspects of addiction research, so that they will be better able, in their current and future professional lives, to conduct research with at-risk populations. In addition, each course is designed to address specific ASPPH learning objectives and competencies in the core areas of public health.

Upon successful completion of the program, students will be able to:

- Apply fundamental concepts, theories and methods of public health to the study of alcohol and addiction,
- Establish associations and causes
- Evaluate clinical and preventive interventions
- Conduct research on policy responses
- Formulate research questions, design studies, collect data, and publish research findings
- Identify, evaluate and respond to ethical challenges to research integrity

Curriculum information

Total number of credits required: **12**

Required courses

Epidemiology of Substance Use Disorders and Psychiatric Co-morbidities (currently listed for Spring 2017 as PUBH 5497, then to be assigned PUBH 5478) – 3 credits

Alcohol and Drug Policy Research (PUBH 5479) – 3 credits

Clinical and Social Service Systems Research in Alcohol and Addiction Science (PUBH 5480) – 3 credits

Research Careers and the Responsible Conduct of Research in Alcohol and Addiction Science (PUBH 5481) – 3 credits

Elective courses

None

Detailed course information

Epidemiology of Substance Use Disorders and Psychiatric Co-morbidities (PUBH 5478; currently listed in Spring 2017 catalogue as PUBH 5497)

Helen Wu, PhD, Associate Professor, School of Medicine, Dept. of Psychiatry

To be offered once a year.

New course; approved.

Alcohol and Drug Policy Research (PUBH 5479)

Thomas Babor, PhD, MPH, Professor, School of Medicine, Dept. of Community Medicine

To be offered once a year.

New course; approved.

Clinical and Social Service Systems Research in Alcohol and Addiction Science (PUBH 5480)

Bonnie McRee, PhD, MPH, Assistant Professor, School of Medicine, Dept. of Community Medicine

To be offered once a year.

New course; approved.

Research Careers and the Responsible Conduct of Research in Alcohol and Addiction Science (PUBH 5481)

Thomas Babor, PhD, MPH, Professor, School of Medicine, Dept. of Community Medicine

To be offered once a year.

New course; approved.

Program evaluation

The evaluation plan is designed to find out whether the certificate program is achieving the goals, objectives and outcomes adopted for the program as a whole and for the specific courses. It is also designed to determine whether adjustments need to be made to both the face-to-face courses and to the curricula before they are disseminated. Performance assessments will report on progress achieved, barriers encountered, and efforts to overcome these barriers. As a part of the assessment, we will solicit opinions and information from the students who have been trained as to how well the curriculum prepared them for the careers in addiction science and for the specific types of research covered by the courses. Areas for assessment include the following: Number of students trained; Types and number of differing specialties of students trained during the project period; Practicum experiences; Student ratings of the program; and Knowledge, attitudes and skills changes from prior to exposure to the curriculum and at the completion of the program. Barriers/solutions to the implementation of courses will also be recorded.

Students admitted to the Certificate in Addiction Science Program will be asked to evaluate courses online in a manner similar to that used by our matriculating graduate students. The public health program administers anonymous online questionnaires for all courses at the end of each academic semester. The questionnaire consists of detailed Likert-scale items, combined with open-ended questions, and is sent via email using an online software program, Survey Gizmo. The questionnaire includes an evaluation of the instructor, course contents, learning environment and learner satisfaction. The questionnaire will be reviewed for appropriateness by the Steering Committee and the Advisory Committee to determine if changes in format and/or substance are necessary. At the beginning of each course evaluation, the student will be asked to self-identify as an MPH, PhD, dual-degree, certificate program or other.

Course evaluation results are submitted to the Steering Committee for review. If the committee feels that the evaluation warrants further improvement in the courses, this will be done before dissemination.

Resources available to support the program

Financial resources

In the first two years, the program will be funded through a combination of NIH grant funds (for program development, instructional design, tuition scholarships, program evaluation, marketing of both the onsite courses and on line courses) and School of Medicine support for faculty salaries. The two-year budget for the NIAAA R25 grant # 1R25AA024435-01 is \$ 475,274. During the first two years, curriculum will be developed and piloted through face to face on campus course delivery and on-line courses will be developed during this time. The on-line courses will be fully developed going into year three. Enrollment and demand will determine the course delivery after year two. Most students enrolled in the Certificate program will be current UConn students from various graduate programs; these students will pay no additional tuition or fees. Students only enrolled in the Certificate program will pay the applicable non-degree costs per course. The instructors for the courses will be funded all years through School of Medicine support for faculty salaries and fringe benefits. The new certificate program will be administered using existing public health staff, under the direction of Dr. Thomas Babor.

Facilities/Equipment/Library/Special Resources

The institutional environment for the proposed program consists of the Department of Community Medicine and its Graduate Program in Public Health as well as the Department of Psychiatry and its NIAAA P60 Alcohol Research Center (ARC), which will provide teaching faculty for course lectures and help to refer post-doctoral students and psychiatric residents into the program.

The Graduate Program in Public Health offers an integrated theory-practice curriculum leading the Master of Public Health (M.P.H.) degree. The program is nationally accredited by the Council on Education for Public Health. With a convenient schedule of evening as well as daytime courses, over 110 students. The majority of students (approximately 75 percent) are enrolled on a full-time basis. The Doctoral Program in Public Health, managed by the Department, currently has 19 doctoral students studying for the Ph.D. degree, and has already graduated five candidates.

The Department of Health Career Opportunity Programs at UConn will help to recruit and retain students. Through the Aetna Health Professionals Partnership Initiative (HPPI), the Department of Health Career Opportunity Programs has developed a pipeline of programs to introduce students in these professional and graduate studies. It also provides academic and career counseling, sponsors lecture series and serves a resource for underrepresented graduate students.