Washington University School of Medicine
Digital Commons@Becker

Posters

2006: Alcohol and Tobacco Dependence: from Bench to Bedside

2006

Biomedical training in alcoholism research

Andrew C. Heath
Washington University School of Medicine in St. Louis

Follow this and additional works at: http://digitalcommons.wustl.edu/guzeposter2006

Part of the Medicine and Health Sciences Commons

Recommended Citation
Heath, Andrew C., "Biomedical training in alcoholism research" (2006). *Posters*. Paper 21 Samuel B. Guze Symposium on Alcoholism.
http://digitalcommons.wustl.edu/guzeposter2006/21

This Poster is brought to you for free and open access by the 2006: Alcohol and Tobacco Dependence: from Bench to Bedside at Digital Commons@Becker. It has been accepted for inclusion in Posters by an authorized administrator of Digital Commons@Becker. For more information, please contact engeszer@wustl.edu.

BIOMEDICAL TRAINING IN ALCOHOLISM RESEARCH

NIAAA TRAINING GRANT OVERVIEW

T32 AA007580

Andrew C. Health, D. Phil.

Director, Missouri Alcoholism Research Center

Spencer T. Olin Professor in Psychology in Psychiatry

Department of Psychiatry

Washington University School of Medicine

Objectives and Goals

- To bring together for multidisciplinary training a pool of outstanding trainees, both clinician and non-clinician PhDs, from various backgrounds including typical disciplines such as biomedical and behavioral sciences and “less conventional” disciplines including mathematics, statistics and physics.
- To provide trainees with mentoring by highly qualified preceptors with experience and funding, who can help them develop into successful independent alcohol researchers.
- Give trainees the opportunity to participate and to manage ongoing research projects and to develop their own research.
- Use of a research apprenticeship model to complement the mentored research with individualized tutorials, lab rotations, journal clubs, and formal didactic training to develop expertise and skills that will allow them to propose and to implement their own independent research.

5 Major Training Areas

i. Behavior genetics and genetic epidemiology

ii. Gene discovery

iii. Developmental psychopathology and longitudinal studies

iv. Basic and cognitive neuroscience

v. Epidemiology, nosology and prevention research

Approach

- The training program is ordinarily 3 years duration reflecting the diverse background of our applicant pool (e.g. psychology, psychiatry, mathematics, behavioral neuroscience, social work)
- 1-2 year post-doctoral fellowships are also offered for experienced alcoholism researchers seeking training in a new area of alcoholism research (e.g. human genetics). Resident physicians are particularly encouraged.

Approach *(con't)*

- At the beginning of their training, trainees develop a mentoring plan jointly with their mentors. Trainees then meet at least weekly with their mentors. Importantly, there is flexibility in the selection in that trainees can change or add additional preceptors as mentors later in their training.
- In addition to specialization in a primary discipline, trainees are encouraged to obtain a sufficient familiarity with at least one other focus area to facilitate fruitful cross disciplinary collaborations in their research careers.

Major Strengths

- Availability of a large faculty with an extensive program of alcoholism research, representing expertise in many aspects of statistical / quantitative, molecular and behavioral genetic, epidemiologic and neurobiologic research on alcoholism
- Highly productive research environment
- Availability of major genetic and epidemiologic data-bases, and access to a large number of ongoing projects, that offer many research options to trainees
- The program's location in one of the nation's leading medical schools, allowing trainees to take advantage of a rich array of didactic courses and seminars and research experiences
- The long tradition of successful mentoring and research training of scientists and physician scientists from diverse intellectual backgrounds

Major Strengths *(con't)*

- The Washington University School of Medicine (WUSM) has a long history of training individuals who have gone on to be leaders in the field of alcohol research.
- WUSM ranks fifth among U.S. medical schools in NIH grant support and the WUSM Department of Psychiatry ranks second among clinical departments with $39M in NIH grants.

Program Administration

Director and Principal Investigator: Andrew C. Heath, DPhil

- Dr. Heath's research has focused on the etiology of alcoholism and its association with other psychiatric and substance use disorders.
- He has served as mentor or co-mentor for approximately 30 post-doctoral trainees and junior faculty in the areas of addiction and/or child psychiatry.
- 1991—Dr. Heath established the NIDA-funded post-doctoral research program, that lead to the establishment of the WUSM as one of the leading centers in the U.S. for training in human genetic research on drug addiction. *(PI: Cicero; T32 DA07313)*
- 1997—He brought together an international, multi-institutional team of collaborators to establish the Midwest Alcoholism Research Center (MARC). Funded by the NIAAA in 1999, the MARC is one of 15 nationwide Alcoholism Research Centers funded by the NIH. *(PI: Heath; P50 AA11998)*
- 1999—He established the NIAAA-funded post-doctoral training program in alcoholism research. *(PI: Heath; T32 AA07580)*

Training Faculty

- The training faculty consists of 36 preceptors and tutors in the five major research areas.
- The preceptors are all established and independently funded researchers who provide research mentoring to the trainees. Collectively, they are PI or Co-Is on more than 180 funded research grants, primarily from NIH, but also from foundations and industry. Many have international reputations in their respective fields of alcohol research.
- Preceptors and tutors have a history of successfully obtaining grant funding, and most are well funded and can provide the resources to support the research training needs of the trainees, as well as to potentially fund the trainees' independent research.
- The mix of more experienced and younger faculty is an excellent way to cover more needs of trainees.

Training Faculty *(con't)*

Preceptors & Tutors

Gustav Akk, PhD
Andrey Anokhin, PhD
Laura Bierut, MD
Kathleen Bucholz, PhD*
Randy Buckner, PhD
C. Robert Cloninger, MD
John Constantino, MD
Linda Cottler, PhD
Danielle Dick, PhD
Seth Eisen, MD
Nuri Farber, MD
Anne Glowinski, MD*#
Alison Goate, DPhil
Julia Grant, PhD
Andrew Heath, DPhil*
Tony Hinrichs, PhD
Collins Lewis, MD
Michael Lynskey, PhD
Pamela Madden, PhD*
Steven Mennerick, PhD*
Louis Muglia, MD, PhD
Elliot Nelson, MD
Rosalind Neuman, PhD
John Olney, MD
Karen O'Malley, PhD
Rumi Price, PhD
Wendy Reich, PhD
John Rice, PhD
John Rohrbaugh, PhD
Jeff Scherrer, PhD
Erik Sirevaag, PhD
Joseph Steinbach, PhD
Richard Todd, PhD, MD*
Alexandre Todorov, PhD
David Wozniak, PhD
Charles Zorumski, MD

*Internal Advisory Committee member
#Training Program Ombudsman

Current Postdoctoral Trainees

	Trainee	Faculty Mentor	Research Focus
3rd Year	Mary Waldron, PhD	A. Heath	Impact of alcoholism and environmental risks associated with parental alcoholism and on reproduction and parenting
2nd Year	Vivia McCutcheon, PhD	A. Heath	Parental alcoholism, early childhood trauma relationships, and risk of psychopathology, as a framework for investigating GxE interaction
	Scott Ochs, PhD	K. O'Malley	Mechanisms of dopaminergic cell death using primary dopaminergic cultures treated with various toxins, as well as ethanol
1st Year	Sean Kristjansson, PhD	J. Rohrbaugh	Multilevel modeling to analyze dynamic posturographic, oculomotor, cardiovascular data to address moderating effects of nicotine on acute alcohol intoxication in smokers/non-smokers
	Caroline Sartor, PhD	M. Lynskey	Substance use disorders from a developmental psychopathology perspective