NIAAA Director’s Report
on Institute Activities to the 136th Meeting of
the National Advisory Council on Alcohol Abuse and Alcoholism

June 5, 2014
Rockville, MD

George F. Koob, Ph.D.
Director
National Institute on Alcohol Abuse and Alcoholism
National Institutes of Health
## NIAAA Budget

### TOTAL MECHANISM

**NIAAA**  
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>MECHANISM</th>
<th>FY 2014</th>
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<th>FY 2015</th>
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<tr>
<td></td>
<td>No.</td>
<td>Amount</td>
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<tr>
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<tr>
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<td><strong>Total, NIAAA Budget Authority</strong></td>
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<td><strong>$444,905</strong></td>
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FY 2014

After a lengthy continuing resolution, the Consolidated Appropriation Act, 2014 (H.R. 3547) was signed by the President on January 17th. NIH received a total of $29.9 billion, $1 billion above the fiscal year 2013 post-sequestration level. This funding will continue support for basic bio-medical, clinical and translational research at NIH.

The FY 2014 appropriation for NIAAA provides $444.9 million. This represents a $11.5 million or a 2.7% increase over the FY 2013 post-sequestration budget level. NIAAA estimates it will support a total of 651 RPGs in FY 2014, including 174 competing awards.
On March 4, 2014, President Obama submitted to Congress his FY 2015 budget request for all Federal agencies – the FY 2015 President’s Budget. Included in this request is a proposed FY 2015 budget for the National Institutes of Health (NIH) of $30.4 billion. The NIAAA budget request for FY 2015 is $446.0 million which is $0.6 million or a 0.1 % increase over the FY 2014 Enacted level.
Honors & Awards

NIAAA Honorary Lectures

18th Annual Mark Keller Honorary Lecture - Dr. Edith Sullivan
“Functional Compromise and Compensation in Alcoholism: Neuropsychology Meets Neuroimaging”
March 25, 2014
Dr. Sullivan is a professor of psychiatry and behavioral sciences at the Stanford University School of Medicine. She was honored for outstanding research in the use of neuroimaging and neuropsychology to show how alcohol-related brain injuries contribute to specific cognitive and motor problems.

6th Annual Jack Mendelson Honorary Lecture - Dr. Bernice Porjesz
“Neurophysiological Endophenotypes in the Search for Genes for Alcoholism”
May 20, 2014
Dr. Porjesz is Professor of Psychiatry and Behavioral Sciences and Director of the Henri Begleiter Neurodynamics Laboratory at SUNY Downstate Medical Center in Brooklyn, NY. She is a leading expert in research on alcoholism, neurophysiology and genetics.
Honors & Awards

NIH Director’s Awards

• **Dr. David Lovinger** will receive an NIH Director’s Award for “discovering novel forms of synaptic plasticity, providing outstanding leadership in the neuroscience of addiction, and demonstrating exemplary skills as a mentor.”

• **Dr. Kenneth R. Warren** has also been selected to receive an NIH Director’s Award for “outstanding and sustained service to the National Institutes of Health and commitment to alcohol and addictions research as the Acting Director of NIAAA.”
Honors & Awards

Other Awards

• The Research Society on Alcoholism has selected NIAAA Deputy Director Dr. Ken Warren to receive the RSA Lifetime Achievement Award. The award recognizes a person with a long, balanced career whose contributions to alcohol research, training, service and advocacy have had a lasting impact on the field.

• Dr. Andrew Holmes, Chief of the Laboratory of Behavioral and Genomic Neuroscience, was selected as the 2014 winner of the A. E. Bennett Award of the Society of Biological Psychiatry for basic research.
**Staff Transitions**

**New Staff**

- **Aurelia Higginbotham** joins the Office of the Director as a Travel Specialist. She previously worked at the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) as an Extramural Support Assistant in the program area of the Musculoskeletal division. There she assisted a staff of one director, nine program officers, and one analyst.

- **Laurie Rosenblatt** joins the Ethics and Management Analysis Branch as a Management Analyst. She previously worked at the NIH Clinical Center, Office of Protocol Services, as a Program Specialist. Her previous work experience is in research and regulation management, as a Patient Coordinator and Clinical Trials Specialist.

- **Dr. Gene-Jack Wang** joins NIAAA as a Senior Medical Staff Clinician with the Laboratory of Neuroimaging. Before coming to NIAAA he was a Professor of Radiology at Stony Brook University in Stony Brook, NY, and the Senior Scientist and Chairman of the Medical Department at Brookhaven National Laboratory in Upton, NY. His area of research is using PET and fMRI to study the neuro-psychiatric mechanisms and manifestations of alcoholism, drug addiction, obesity, and eating disorder in humans.
Staff Transitions

Retiring

• **Dr. Page Chiapella** and **Dr. Cherry Lowman** recently retired from the Division of Treatment and Recovery Research (DTRR), where they served as health scientist administrators for 23 years. Dr. Chiapella was instrumental in developing the DTRR portfolio on recovery, mutual help, and suicide. Dr. Lowman developed the foundation for the health services research portfolio and was considered an expert on the topic of relapse prevention.

• **Captain David T. George, M.D. (Ted)** has retired from the PHS on March 31, 2014. He will also continue to support NIAAA by his continued involvement with a collaborative NINDS protocol involving Deep Brain Stimulation of individuals with treatment refractory alcohol dependence.

• **Dr. Lorraine Gunzerath** retired from federal service on February 28, 2014. Dr. Gunzerath had served many significant roles within the Institute. Among these, she led the development of NIAAA’s first electronic grants data system (SMART), which served to maintain oversight of the scope and changing dynamics of the Institute’s research programs. Following a request to the Institute from the White House for a comprehensive report on the health effects of moderate drinking, Dr. Gunzerath took the lead responsibility for this activity which included an expert state-of-the-science review and published report.
Staff Transitions

New Positions

• **Dr. Bridget Williams-Simmons** has been appointed Chief of the Science Policy Branch (SPB). In 2007, Dr. Williams-Simmons joined NIAAA as a health scientist administrator in SPB where she has worked on a wide range of science policy topics. During that time she served as NIAAA’s American Recovery and Reinvestment Act (ARRA) coordinator as well as lead on a number of other trans-NIH projects.

• **Dr. Patricia Powell** has been appointed Associate Director for Scientific Initiatives in the Office of the NIAAA Director. Previously she was Chief of the Science Policy Branch, where she served since 2007. Dr. Powell was instrumental in working with the Governor’s Spouses Initiative *Leadership to Keep Children Alcohol Free* and was a Senior Scientific Editor for the Surgeon General’s 2007 *Call to Action to Prevent and Reduce Underage Drinking*.

• **Dr. Markus Heilig** has accepted a position as the Director of of a new Swedish Science Council – funded Center for Social and Affective Neuroscience at Linköping University in Linköping, Sweden to start in July 2015. He will be stepping down as NIAAA and NIDA Clinical Director to facilitate the transition. Dr. David Goldman wil serve as Acting Clinical Director for NIAAA.
Staff Transitions

Departing

• **Monique Hill** accepted a position at the National Institute of Neurological Disorders and Stroke (NINDS) as their Committee Management Specialist. In addition to similar duties held at NIAAA, she will be responsible for ensuring reviewers receive compensation, conducting Ethics Reviews for Special Government Employees (Council, PAC, and BSC members).
New Request for Applications (RFAs) and Funding Opportunity Announcements (FOAs)

New Funding Opportunity Announcements (FOAs):

• PAR-14-051 (R01): Mechanisms of Behavior Change in the Treatment of Alcohol use Disorders and companions: PAR-14-052 (R03) and PAR-14-053 (R21)

• PA 14-124 (R21),-123 (R01): Alcohol-Induced Effects on Tissue Injury and Repair

NIAAA reissued the following FOAs

• PA 14-198 (R01): Unconventional Roles of Ethanol Metabolizing Enzymes, Metabolites, and Cofactors in Health and Disease

• PA 14-188 (R21),-189 (R03),-190: Epidemiology and Prevention in Alcohol Research

• PA-14-138 (R21),-139 (R01) on Neuroimmune Mechanisms of Alcohol Related Disorders
New Medications Development Focus in the DTRR Program Announcements

In March of this year, DTRR issued a Notice that clarified the scope of the funding opportunity announcements entitled Alcohol Use Disorders; Treatment Services; and Recovery Research (R01; R21; R03).

Specifically, the new section states: Applications that propose standard efficacy trials of widely-studied and well-characterized medications such as naltrexone, topiramate, acamprosate, varenicline, ondansetron, gabapentin, baclofen, and disulfiram in alcohol dependent subjects will not be considered.
OPIOIDS INDUCE DISSOCIABLE FORMS OF LONG-TERM DEPRESSION OF EXCITATORY INPUTS TO THE DORSAL STRIATUM

*Significance:* This finding advances our understanding of the role of neuroplasticity – the change in a neural pathway associated with learning a behavior – in the molecular actions of intoxicating/addictive substances. Future studies will examine how alcohol interacts with this type of neuroplasticity. (Atwood BK, Kupferschmidt DA, Lovinger DM. Nat Neurosci. 2014 Apr;17(4):540-8)

DEEP BRAIN OPTICAL MEASUREMENTS OF CELL TYPE-SPECIFIC NEURAL ACTIVITY IN BEHAVING MICE


INTRAVENOUS GHRELIN ADMINISTRATION INCREASES ALCOHOL CRAVING IN ALCOHOL-DEPENDENT HEAVY DRINKERS: A PRELIMINARY INVESTIGATION

*Significance:* These findings provide preliminary evidence that ghrelin, a hormone that regulates hunger, may also play a role in the neurobiology of alcohol craving, thus demonstrating a novel pharmacologic target for treatment. (Leggio L, Zywiak WH, Fricchione SR, Edwards SM, de la Monte SM, Swift RM, Kenna GA. Biol Psychiatry. 2014 Mar 25 [Epub ahead of print])
DIVISION OF EPIDEMIOLOGY AND PREVENTION RESEARCH

STATE VARIATION IN UNDERREPORTING OF ALCOHOL INVOLVEMENT ON DEATH CERTIFICATES:
MOTOR VEHICLE TRAFFIC CRASH FATALITIES AS AN EXAMPLE

Significance: Based on the results of this study, researchers conclude that the role of alcohol in injury death appears to be vastly underreported. (Castle IJ, Yi HY, Hingson RW, White AM. J Stud Alcohol Drugs. 2014 Mar;75(2):299-312)

RANDOMIZED CONTROLLED TRIAL OF A WEB-DELIVERED PERSONALIZED NORMATIVE FEEDBACK INTERVENTION TO REDUCE ALCOHOL-RELATED RISKY SEXUAL BEHAVIOR AMONG COLLEGE STUDENTS

Significance: Findings demonstrate that personalized normative feedback specific to drinking in sexual situations reduced alcohol-related risky sexual behavior. The study highlights the potential utility of a brief intervention that can be delivered via the Internet to reduce high-risk drinking and alcohol-related risky sexual behavior among college students. (Lewis MA, Patrick ME, Litt DM, Atkins DC, Kim T, Blayney JA, Norris J, George WH, Larimer ME. J Consult Clin Psychol. 2014 Jun;82(3):429-40)

ASSOCIATION BETWEEN RIDING WITH AN IMPAIRED DRIVER AND DRIVING WHILE IMPAIRED

Significance: This study found that past experience riding with an alcohol impaired driver increased the likelihood that a teen driver would receive a DWI once they were licensed. (Li K, Simons-Morton BG, Vaca FE, Hingson R. Pediatrics. 2014 Apr;133(4):620-6).
DIVISION OF EPIDEMIOLOGY AND PREVENTION RESEARCH

IMPACT OF INTERVENTIONS TARGETING UNHEALTHY ALCOHOL USE IN KENYA ON HIV TRANSMISSION AND AIDS-RELATED DEATHS

**Significance:** An alcohol intervention with the effectiveness observed in a published randomized controlled trial has the potential to reduce infections over 20 years by nearly 5% and avert nearly 18,000 deaths related to HIV. (Braithwaite RS, Nucifora KA, Kessler J, Toohey C, Mentor SM, Uhler LM, Roberts MS, Bryant K. Alcohol Clin Exp Res. 2014 Apr;38(4):1059-67)
DIVISION OF METABOLISM AND HEALTH EFFECTS

ACUTE BINGE DRINKING INCREASES SERUM ENDOTOXIN AND BACTERIAL DNA LEVELS IN HEALTHY INDIVIDUALS

Significance: The study demonstrates for the first time that a single acute binge alcohol drinking has the potential to increase not only serum endotoxin but also 16S rDNA levels, a biomarker for bacterial translocation into the blood, coupled to an increase in inflammatory cytokine levels that disturb innate immune responses and that this effect is greater in men than in women. This differential effect might have implication on alcohol’s effect on overall women’s health and opens a new avenue for future alcohol research. (Bala S, Marcos M, Gattu A, Catalano D, Szabo G. PLoS One. 2014 May 14;9(5):e96864)

DIETARY CHOLESTEROL PROTECTS AGAINST ALCOHOL-INDUCED CEREBRAL ARTERY CONSTRICTION

Significance: The authors studied the effect of dietary cholesterol intake in a rat model and demonstrated a protective effect of cholesterol buildup in cerebral arteries against AICAC. Identification of molecular mechanisms that underlie cholesterol-driven protection against AICAC may unveil therapeutic countermeasures to alcohol-driven cerebrovascular pathology by targeting EtOH sensing sites on BK channels or counteracting EtOH’s effects in biological membranes. (Bukiya A, Dopico AM, Leffler CW, Fedinec A. Alcohol Clin Exp Res. 38:1216-26 2014)
MITOCHONDRIAL FUSION IS FREQUENT IN SKELETAL MUSCLE AND SUPPORTS EXCITATION-CONTRACTION COUPLING

**Significance:** This paper describes mitochondrial fusion in skeletal muscle for the first time, and identifies an important gene Mfn1, essential for fusion and shown to be decreased by an alcohol diet-while other fusion proteins were unchanged. This decrease was coupled with a massive decrease in mitochondrial fusion, thus blocking this vital repair mechanism that may be behind development of muscle weakness. (Eisner V, Lenaers G, Hajnóczky G. *J Cell Biol*. 2014 Apr 28;205(2):179-95 2014)

INTERACTIVE EFFECTS OF IN VITRO BINGE-LIKE ALCOHOL AND ATP ON UMBILICAL ENDOTHELIAL NITRIC OXIDE SYNTHASE POST-TRANSLATIONAL MODIFICATIONS AND REDOX MODULATION

**Significance:** This study suggests that binge-like alcohol has detrimental effects on important phosphorylation of serine and threonine residues associated with umbilical endothelial NO synthase (eNOS) redox activity. Their results improves our understanding of the impact of binge-like alcohol exposure on gestational vascular function, extending previous findings of alcohol's negative impact on the uterine NO system and suggesting a role for umbilical vascular maladaptations in the etiology of FASD. (Subramanian K, Naik VD, Sathishkumar K, Sawant OB, Washburn SE, Wu G, Yallampalli C, Saade GR, Hankins GD, Ramadoss J. *Reprod Toxicol*. 2014 Jan;43:94-101)
Altered Sedative Effects of Ethanol in Mice with α1 Glycine Receptor Subunits That Are Insensitive to Gβγ Modulation

Significance: This study demonstrates that knock-in mice with a phenotypically silent mutation in the glycine receptor show shorter times in loss of righting reflex in response to sedative dose of ethanol, suggesting lower ethanol sensitivity. These data provide the first evidence to link a molecular site in the glycine receptor with the sedative effects produced by intoxicating doses of ethanol. (Aguayo LG, Castro P, Mariqueo T, Muñoz B, Xiong W, Zhang L, Lovinger DM, Homanics GE. Neuropsychopharmacology. 2014 May 7 [Epub ahead of print])

Prenatal Alcohol Exposure Modifies Glucocorticoid Receptor Subcellular Distribution in the Medial Prefrontal Cortex and Impairs Frontal Cortex-Dependent Learning

Significance: This study demonstrates that mice prenatally exposed to alcohol show deficits in glucocorticoid receptor trafficking in the medial prefrontal cortex, which may contribute to the reduced flexibility in reversal learning. It reveals the important role of glucocorticoid receptors in the impairment of the frontal cortical-dependent behavior associated with prenatal alcohol exposure. (Allan AM, Goggin SL, Caldwell KK. PLoS One. 2014 Apr 22;9(4):e96200)
DIVISION OF NEUROSCIENCE AND BEHAVIOR

DRINKING ALCOHOL HAS SEX-DEPENDENT EFFECTS ON PAIR BOND FORMATION IN PRAIRIE VOLES

Significance: Voluntary alcohol consumption inhibited partner preference formation in socially monogamous male prairie voles, but facilitated partner preference in females. The effects of alcohol on social bonding were mediated by neural mechanisms regulating pair bond formation (especially neuropeptide Y and corticotropin-releasing factor) and not alcohol's effects on mating, locomotor, or aggressive behaviors. These findings provide the first evidence to our knowledge that alcohol has a direct impact on the neural systems involved in social bonding in a sex-specific manner, providing an opportunity to explore the mechanisms by which alcohol affects social relationships. (Anacker AM, et al. Proc Natl Acad Sci U S A. 2014 Apr 22;111(16):6052-7)

RESTRAINT STRESS ALTERS NOCICEPTIN/ORPHANIN FQ AND CRF SYSTEMS IN THE RAT CENTRAL AMYGDALA: SIGNIFICANCE FOR ANXIETY-LIKE BEHAVIORS

Significance: This study shows that stress leads to an increased NOP-mediated neuronal activity in the CeA. Alcohol withdrawal, a condition associated with dysregulation of the stress system and increased CRF tone in the CeA, has also been found to induce increased function of N/OFQ. These findings suggest a critical role of the N/OFQ system in opposing the recruitment of the CeA CRF system associated with stress-related stimuli, including alcohol withdrawal. (Ciccocioppo R, de Guglielmo G, Hansson AC, Ubaldi M, Kallupi M, Cruz MT, Oleata CS, Heilig M, Roberto M. Journal of Neuroscience. 2014 Jan 8; 34(2):363-372)
DIVISION OF NEUROSCIENCE AND BEHAVIOR

FUNCTIONAL MAGNETIC RESONANCE IMAGING (FMRI) RESPONSES TO ALCOHOL PICTURES PREDICTS SUBSEQUENT TRANSITION TO HEAVY DRINKING IN COLLEGE STUDENTS

**Significance:** College students who transitioned to heavy use a year later showed at baseline a higher blood oxygen level-dependent (BOLD) response (as measured by functional magnetic resonance imaging) to alcohol-related pictures in several brain areas compared to those college students who remained either continuously moderate or heavy drinkers. The activation of brain areas to alcohol cues (i.e., pictures) which served as a single factor in the regression model predicted subsequent transition to heavy drinking better than other factors such as a family history of alcoholism or level of impulsivity. (Dager AD, Anderson BM, Rosen R, Khadka S, Sawyer B, Jiantonio-Kelly RE, Austad CS, Raskin SA, Tennen H, Wood RM, Fallahi CR, Pearlson GD. *Addiction*. 2014 Apr; 109:585-595)

CHRONIC ALCOHOL DISRUPTS DOPAMINE RECEPTOR ACTIVITY AND THE COGNITIVE FUNCTION OF THE MEDIAL PREFRONTAL CORTEX

**Significance:** This study links the impairment of dopamine D2/D4 receptor mediated signaling to ethanol-induced cognitive deficit. It demonstrates that chronic intermittent ethanol exposure significantly disrupted D2/D4 receptor modulation of the neuronal activity in the medial prefrontal cortex (mPFC) and reduced behavioral flexibility. (Trantham-Davidson H, Burnett EJ, Gass JT, Lopez MF, Mulholland PJ, Centanni SW, Floresco SB, Chandler LJ. *Journal of Neuroscience*. 2014 Mar 5;34 (10):3706-18)
REDUCED ETHANOL CONSUMPTION BY ALCOHOL-PREFERRING (P) RATS FOLLOWING PHARMACOLOGICAL SILENCING AND DEEP BRAIN STIMULATION OF THE NUCLEUS ACCUMBENS SHELL

Significance: This study highlights the potential of deep brain stimulation (DBS) as a treatment intervention. The study demonstrated two points: 1) pharmacological inactivation of the bilateral nucleus accumbens shell (AcbSh) reduces ethanol (EtOH) operant responding in the alcohol preferring (P) rat after chronic EtOH use has been established; and 2) unilateral DBS of the AcbSh is effective at reducing daily EtOH consumption in alcoholic animals. (Wilden JA, Qing KY, Hauser SR, McBride WJ, Irazoqui PP, Rodd ZA. J Neurosurg. 2014 Apr;120(4):997-1005)
CUMULATIVE PROPORTION OF RESPONDERS ANALYSIS (CPRA) AS A TOOL TO ASSESS TREATMENT OUTCOME IN ALCOHOL CLINICAL TRIALS

**Significance:** This study presented a novel application of an analytical technique—cumulative proportion of responders analysis—to determine which dichotomous endpoints, derived from continuous drinking measures, have the greatest treatment effects in alcohol clinical trials. (Falk DE, Litten RZ, Anton RF, Kranzler HR, Johnson BA, ACTIVE Workgroup. *J Stud Alcohol Drugs.* 2014 Mar;75(2):335-46)

RISKS OF ALCOHOL USE DISORDERS RELATED TO DRINKING PATTERNS AND A HISTORY OF TREATMENT FOR OR CONCERN ABOUT HEAVY DRINKING

**Significance:** The results of this study provide quantitative guidance for primary care practitioners who wish to make population-based recommendations to patients who might benefit by reducing both overall intake and amounts per occasion in an effort to lower their risks of developing AUDs. (Greenfield TK, Bond J, Ye Y, Kerr WC, Nayak MB, Kaskutas LA, Anton RF, Litten RZ, Kranzler HR. 2014. *J Stud Alcohol Drugs.* 2014 Mar;75(2):319-27)
**DIVISION OF TREATMENT AND RECOVERY RESEARCH**

**RESEARCH OPPORTUNITIES FOR MEDICATIONS TO TREAT ALCOHOL DEPENDENCE: ADDRESSING STAKEHOLDERS' NEEDS**

**Significance:** This commentary poses a number of issues that must be addressed in order to advance the alcohol research field and to make medications a mainstream treatment for problematic drinking. These issues are framed from the perspective of the various stakeholders involved, including clinicians, patients, regulatory agencies, the pharmaceutical industry, and third-party payers. (Litten RZ, Falk D, Ryan M, Fertig J. Alcohol Clin Exp Res. 2014 Jan;38(1):27-32)

**FIVE-YEAR HEALTHCARE UTILIZATION AND COSTS AMONG LOWER-RISK DRINKERS FOLLOWING ALCOHOL TREATMENT**

**Significance:** This study found that, following outpatient alcohol treatment, abstinent patients and low-risk drinkers had similar healthcare utilization and costs over a 5-year followup in a large, private, nonprofit integrated healthcare delivery system. (Kline-Simon AH, Weisner CM, Parthasarathy S, Falk DE, Litten RZ, Mertens JR. Alcohol Clin Exp Res. 2014 Feb;38(2):579-86)

**ALCOHOL MEDICATIONS DEVELOPMENT: ADVANTAGES AND CAVEATS OF GOVERNMENT/ACADEMIA COLLABORATING WITH THE PHARMACEUTICAL INDUSTRY**

**Significance:** This commentary examines how the medication development process can be expedited via collaborations between government, academia, and pharmaceutical and biotechnology companies. (Litten RZ, Ryan M, Falk D, Fertig J. Alcohol Clin Exp Res. 2014 May;38(5):1196-9)
New Rules
NIH Policy on Resubmission Applications
NOT-OD-14-074

For application due dates after April 16, 2014:

• Following an unsuccessful resubmission (A1) application (including competing renewals), applicants may submit the same idea as a new (A0) application for the next appropriate due date.

• Similarly, a change of grant activity code (e.g., from an R01 to an R21 or from an R03 to an R01) usually involves a change of eligibility and/or review criteria. These applications also MUST be prepared as new applications.

• This policy applies to all NIH Funding Opportunity Announcements (FOAs) that allow resubmissions, including FOAs for research grants, the NIH Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, Career Development Awards, Individual Fellowships, Institutional Training Grants, Resource Grants, Program Projects, and Center Grants.
Change in Biosketch Contents

Length. Extend biosketch up to five pages

Section A. Personal Statement: Briefly describe why you are well-suited for your role in the project described in this application. The relevant factors may include aspects of your training; your previous experimental work on this specific topic or related topics; your technical expertise; your collaborators or scientific environment; and your past performance in this or related fields (you may mention specific contributions to science that are not included in Section C).

B: Positions and Honors: List in chronological order previous positions, concluding with the present position. List any honors. Include present membership on any Federal Government public advisory committee.

Section C. Contributions to Science: Briefly describe up to five of your most significant contributions to science. For each contribution, indicate the historical background that frames the scientific problem; the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work. For each of these contributions, reference up to four peer-reviewed publications that are relevant to that contribution. The description of each contribution should be no longer than one half page including any figures. Please also provide a link to a full list of your published work as found in a publicly available digital data base such as PubMed, myBibliography, or SciENcv all of which are maintained by the National Library of Medicine.

Section D. Research Support: List both selected ongoing and completed research projects for the past three years (Federal or non-Federally-supported).
Innovativeness should be valued and scored higher than approach in the overall score.

Innovativeness can be a hypothesis or a “fishing expedition” DOES NOT HAVE TO BE A NEW TECHNIQUE.

Discussion can be positive or negative and should be encouraged to be so. Discussion does NOT equal poor score.

Ad hominem’s are not allowed.

Reviewer must have read the grant.

Adequate time must be allotted for appropriate review (no rush to the exits).

Chair should strongly urge a reconsideration of “not discussed applications” in innovative areas, with young investigators etc.

Recommendations for study section are reviewed by the Director. No more Assistant Professors; reviewers must have been funded by NIH and preferably have had a grant refunded or have multiple awards.

Reviewers should be reminded that “you meet the same people going up the elevator as you meet going down the elevator.

Program staff are encouraged to attend the review meeting and observe the breadth of applications being reviewed.

R21 Preliminary data is not a criteria.

New Investigator proposals should focus on the potential for independence in research.

Embrace CRAN.
Recommendations
NIAAA Review Subcommittee Chairs Orientation Meeting
May 19, 2014

• Include a hard copy of each the abstract page and specific aim page for each grant at the meeting for each reviewer on the review panel.
• Revisit R21 and R24 criteria each meeting of the review panel.
• Update scores post-discussion.
• Update critiques post-discussion.
• Remind reviewers that minor tweaks can be handled by program staff and should not compromise the score of an otherwise outstanding proposal.
• Remind reviewers that the amount of funding or number of grants held by an applicant is not a review criterion.
• Percent effort and overlap are not review criteria but rather the domain of program staff.
• SRO and Chairs should try and flag R21 submissions from new investigators.
• Applications with outstanding scores in the Innovative category will be flagged by Council and/or the Director at Pay Plan meetings.
• Potential biases against alcohol research at CSR will be addressed by Director with CSR; any evidence of such should be sent to Dr. Bautista.
• Director will endeavor to meet with Chairs of CSR committees where alcohol research is reviewed.
<table>
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<tr>
<th>Fiscal Year</th>
<th>Activity</th>
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<th>Awards</th>
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<td>All RPG</td>
<td>853</td>
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<td>19.5%</td>
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New Initiatives
In response to a request from NIAAA’s College Presidents Working Group, NIAAA engaged top researchers in the field to develop an interactive, user-friendly, print and online “decision support system” to help colleges and universities select appropriate strategies to meet their alcohol intervention goals.

The tool will allow college presidents and staff to review the strategies they are already using as well as explore others that may serve them better.

Users will be able to search for strategies according to intervention level (e.g., individual, group, campus-wide, community) and evaluate other factors, such as effectiveness, barriers and costs, affecting implementation.

We envision that much like online shopping applications, the online tool will allow users to select a set of strategies for side-by-side comparisons.
NIAAA Comprehensive Factoid Compendium

Facts and statistics about the scope of alcohol misuse

First draft outline:

• Alcohol Use in the United States
• Alcohol Use Disorders
• Alcohol Related Deaths
• Economic Burden
• Global Burden
• Family Consequences
• Underage Drinking
• Alcohol and College Drinking
• Alcohol and Pregnancy
• Alcohol and the Human Body

From: Vivian Faden, Aaron White, Fred Donodeo
What we have:

• SCRAM which is a transdermal device, worn around the ankle, that can detect drinking in real time and is currently being used in the criminal justice setting.

• Non-invasive in-vehicle alcohol detection technologies. Touch-based and breath-based approaches being piloted.

What we need:

A small unobtrusive wearable, device that cannot be tampered with and that provides real time data on blood or breath alcohol levels or some other measure of alcohol consumption. The device would be useful for:

• Research studies on both alcohol and HIV/AIDS
• Criminal justice setting monitoring
National Longitudinal Study of Neurodevelopmental Consequences of Substance Use (Uber CRAN)

• Drug policy changes creates an urgency to understand effects of drugs (cannabinoids, alcohol, nicotine) to the developing human brain.

• Study intends to:
  – Assess the impact of sporadic vs regular drug use on the developing brain
  – Explore gateway interactions
  – Identify neurodevelopmental pathways that link adolescent SUD and mental illnesses
  – Assess effect of multiple substances in combination

• Large representative cohort (~ 10,000) youth followed over a 10-year period, beginning before drug use into early adulthood.

• Outcome measures--substance use, academic achievement, IQ, cognition

• Estimated to cost $30 million/year for 10 years.
Where we want to be

1. FDA approval for medications for treatment of alcoholism
2. Implementation of effective behavioral treatments for alcoholism
3. Implementation of effective prevention strategies for adolescent drinking
4. Implementation of effective prevention strategies for drinking during pregnancy
5. Elimination of alcohol–related HIV pathology
6. Establishment of effective treatments for fetal alcohol spectrum disorder (FASD)
7. Development effective treatments for alcoholic liver disease
8. Appropriate treatment of co-morbidities associated with alcoholism
9. Successful recruitment of young investigators to the alcohol field, elimination of disparities in the alcohol field. Equal pay for women and minorities in the alcohol field
Thank You!

George F. Koob, Ph.D.
Director
National Institute on Alcohol Abuse and Alcoholism
National Institutes of Health