

## Post-doctoral funding application

### Executive summary

This application is for the funding of Jacques Gaume's second year of postdoctoral fellowship at the Center for Alcohol and Addictions Studies (CAAS) at Brown University, Providence, RI, USA, from August 2012 to July 2013.

There, he will primarily conduct the analyses on data amassed in Switzerland under the supervision of distinguished alcohol researchers. His research will focus on the influence of the counselor on brief motivational intervention (BMI) efficacy in reducing alcohol use in 20-year old men. Indeed, whereas research on BMI for young people has shown promising results in reducing alcohol use and related consequences, little is known about how it works or which counselor characteristics (e.g. background and clinical experience) and within-intervention behaviors are most effective in triggering behavior changes. Study participants are 216 young men randomly selected from those screened as hazardous drinkers while attending the Swiss army conscription process, which is mandatory for all Swiss males at age 20 (thus minimizing social status bias and sample selectivity). Conscripts received a single BMI conducted by one of 18 counselors who delivered 12 BMIs each. Counselors were selected to maximize differences in their characteristics, such as background, clinical and BMI experience. Within a mediation framework, we will test several links between counselor characteristics, BMI content (counselor and subject behaviors, working alliance), and alcohol use outcomes at both short (1- and 3-month) and long term (18-month) follow-ups. The proposed project will be one of the first prospective studies that focus specifically on the empirical investigation of BMI mechanisms. By understanding the counselor characteristics and behaviors during BMI that are most effective in triggering behavior change among subjects, this project could have crucial implications for clinical practice, counselor training, assessment and selection, and potentially result in increased BMI efficacy and positive impacts on public health.

CAAS is among the best laboratories in the world for behavioral treatment research. Numerous projects aimed at testing mechanisms of change, and mediators and moderators of treatments have been conducted and are ongoing. CAAS is also renowned for its BMI research on adolescents and young adults, thus it is an excellent environment for offering support, insights, and mentorship for the applicant. As a postdoctoral fellow at CAAS, Jacques Gaume will be co-mentored by two of the most outstanding BMI mechanisms researchers: Professor Richard Longabaugh and Professor Molly Magill. They will closely follow the applicant's work, review and critique preliminary findings and manuscript drafts, provide insights and new ways of thinking, give support as regard analytical methodology, as well as strengthen other skills necessary toward the development of a higher-level scientific career.

The applicant will also have abundant opportunities to be involved in many of the ongoing research projects at CAAS. His mentors and other faculty members already have shown interest in sharing data from their own projects and/or including the applicant in their analyses and manuscript writing. These collaborations will be important occasions in which to gain much additional experience in research and methodology.

In addition to the research projects described above, the applicant will be involved in the postdoctoral training program at CAAS. The program consists of formal courses; a research forum; distinguished researchers presentations; seminar series on statistics, research methodology, and ethical issues; and a seminar on grant writing. The writing seminar will equip the applicant with tools that will enable him to construct a grant application for future research. This training program will be a valuable and significant opportunity for the applicant to acquire a broadened general knowledge base of substance abuse and dependence, and to acquire skills in up-to-date, advanced research methods.

Jacques Gaume received funding for the first year of this program (August 2011 to July 2012) from the Swiss National Science Foundation (SNSF). This grant was of CHF 73'540.-. New rules at the SNSF limit funding renewal for post-doctoral grants. Only partial renewal could be accepted and proofs should be given that funding was requested to other funding agencies and to the host institute. The CAAS has no funding available for non-US citizens and will thus not provide financial remuneration.