**REPORT 2007** 



# **EDITORIAL**

As a founding member of the European Research Advisory Board (ERAB) and first Chairman of the Board of Directors it gives me great pleasure to recommend this report to you. You will find here not only our achievements in 2007 but also our success since our foundation in 2003. I am delighted with the speed that ERAB has become established and recognised by the scientific community and the European Commission.

ERAB is a success story which The Brewers of Europe and its members can be very proud of! As one of the first members of the Advisory Board I was honoured to be asked to succeed the founding Chairman of the ERAB Advisory Board, Professor Oliver James. ERAB has achieved a great deal in its first four years as is shown in this report. The quality of the applications it receives are of an increasingly high level and it is supported by a growing number of internationally renowned peer reviewers but, more importantly, publications from the research are now being published in top scientific journals demonstrating the quality of the science which ERAB is funding.



**Raymond Georis**Chairman, ERAB Board of Directors

Years



Philippe De Witte Chairman, ERAB Advisory Board

MWH

### INTRODUCTION

The European Research Advisory Board (ERAB) was established as an independent Charity in Brussels in 2003 to fund European biomedical and psychosocial research into the effects of beer and other alcoholic beverages. In May 2008 ERAB will be five years old.

2007 has seen a number of changes in the membership of the ERAB Boards. In January Professor Philippe De Witte took over the Chair of the Advisory Board from Professor Oliver James. Professor James was one of the three founder members of ERAB and without his enthusiasm and dedication ERAB would not have flourished to the same extent. ERAB is fortunate that Professor James has agreed to maintain an interest and he has since been appointed an honorary member of the Board of Directors.

2007 was also the year in which both Boards members were asked whether they would agree to serve a second three year term of office. Most agreed to stay on. The exceptions are as follows:

- · Professor Piet van den Brandt of the Department of Epidemiology, Maastricht University, stood down from the Advisory Board and has been replaced by a colleague, and former ERAB grantee, Dr Martje Weijenberg;
- · Mr Artur Santos Silva, Chairman, Portuguese Bank of Investment stood down from the Board of Directors and has been replaced by Professor Daniel Bessa of EGP - Escola de Gestão do Porto;
- Baron Daniel Cardon de Lichtbuer, President, Child Focus Europe also stood down from the Board of Directors;

Mrs Heidrun Piwernetz, the Head of Representation of Bavaria to the European Union replaced her predecessor after she took over her

ERAB is grateful to the members of both Boards who generously give their time and expertise to ERAB without reward.

# **KEY PERFORMANCE INDICATORS 2003 - 2007**

Total subscriptions	€ 1,719,000
Total grant spend	€ 1,561,042
Full grants funded	21
Biomedical grants	16
Psychosocial grants	5
Travel Awards	18
Exchange Awards	6

Sponsorship of 2 ESBRA conferences - Cambridge, UK in 2005 and Berlin, Germany 2007.

Funding research in many different parts of EU - 10 countries to date

ERAB was founded along the same lines as the ABMRF - The Foundation for Alcohol Research in the USA which celebrated its 25<sup>th</sup> Anniversary in 2007. In their 2007 Annual Report they said

"Over the last 25 years, the ABMRF has contributed nearly \$ 39,000,000 in support of research and conferences exploring the effects of alcoholic beverages on health and behaviour. We have supported more than 450 individual scientists many of whom are now leaders in the field. Although the individual awards are modest in size, for many investigators they come at a crucial time in their careers when they are establishing their independence.... Over time, we have seen the legacy continue as many of those who were grantees in the past have become highly respected leaders in the field..."

ABMRF is now the largest independent non-profit making foundation in North America in the field and has earned the respect of both the research community and Government. ERAB is 20 years behind the ABMRF but is already following closely in their footsteps.

# CONTRIBUTORS

Without the continued support of the European Brewing Sector ERAB would not be able to continue to fund independent research into the biomedical and socio behavioural aspects of alcohol consumption. ERAB is grateful to its contributors.

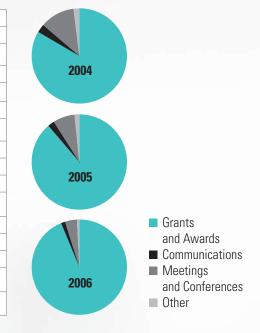
The following associations and companies support ERAB:

- · APCV Associação Portuguesa dos Produtores de Cerveja, **Portugal**
- · Associazione degli Industriali della Birra e del Malto, Italy
- · Brasseurs de France, France
- · Bryggeriforeningen, Denmark
- · Belgian Brewers, Belgium
- · Centraal Brouwerij Kantoor CBK, Netherlands
- · Cerveceros de España, Spain
- · Deutscher Brauer-Bund e.V., Germany
- · Grants Committee of the British Beer & Pub Association and the Institute of Brewing & Distilling, UK
- · Greek Brewers' Association, Greece
- · Irish Brewers' Association, Ireland
- · Panimoliitto, Finland
- · Sveriges Bryggerier AB, Sweden
- · Verband der Brauereien Österreichs, Austria
- · The Brewers of Europe
- Carlsberg
- · Heineken
- InBev
- SABMiller
- · Scottish & Newcastle

### **FINANCE**

An average of five full (€ 120,000) grants are funded each year together with 4 or 5 travel awards and one or two exchange awards. The research grant expenditure accounts for the majority of the annual budget. – average 89.5% to date.

2002	0004	0005	
2003	2004	2005	2006
€	€	€	€
414,500	434,500	445,000	425,000
701	2,365	7,972	1,926
415,201	436,865	452,972	426,926
-	390,390	496,600	421,846
-	-	2,500	11,656
-	390,390	499,100	433,502
-	9,195	9,334	5,310
15,948	59,023	33,838	19,222
17,297	5,743	7,077	5,370
33,245	464,351	549,349	463,404
381,956	354,470	256,742	220,264
	€  414,500 701 415,201  15,948 17,297 33,245	€ €  414,500 434,500  701 2,365  415,201 436,865  - 390,390 390,390  - 390,390  - 9,195  15,948 59,023  17,297 5,743  33,245 464,351	€ € €  414,500 434,500 445,000  701 2,365 7,972  415,201 436,865 452,972  - 390,390 496,600 2,500 - 390,390 499,100  - 9,195 9,334  15,948 59,023 33,838  17,297 5,743 7,077  33,245 464,351 549,349



### **IMAG 2006**

International Medical Advisory Group (IMAG) conferences have been held since 1972 and offer an opportunity for the Medical Advisors to the brewing industry worldwide to discuss topical issues and recent research advances in the alcohol field.

The 2006 IMAG was the 34th conference and was held in Copenhagen. The scientific programme was planned by ERAB and the conference was hosted by The Brewers of Europe with assistance from Carlsberg.

This was the first European conference since the foundation of ERAB and it was an opportunity for ERAB grantees to present their research. Of the 19 presentations – 12 were from grantees.

The two-day programme featured five sessions: Alcohol, Vascular Disease and Lifestyle; Neuroscience—Alcohol and Nicotine Interactions; Alcohol, Cancer and Epidemiology; Genetics and Young people and Drinking. Robert Madelin, Director-General for DG SANCO, showed his approval of ERAB by agreeing to chair the session on Alcohol and Young people.

Copies of the abstracts for the meeting are available from info@erab.org

The final session of the conference was devoted to a discussion about future research in this area. Key conclusions were that:

- Genetics will play an increasingly important part in understanding why some individuals drink excessively and will provide a tool to reduce harmful consumption.
- The influence of patterns of consumption need to be further understood.
- Interventions tailored for adolescents must be found to tackle binge drinking.

- New, more powerful biomarkers will help identify individuals with potential problems.
- · The interaction between alcohol and obesity needs further study.

ERAB will next host an IMAG in 2010 and undoubtedly by then some of these issues will have been addressed as a result of ERAB funding.

### **IMAG 2007**

The 2007 IMAG was held in Halifax, Nova Scotia. Delegates from 16 countries on six continents attended. The scientific programme was planned by the ABMRF and the conference was hosted by the Brewer's Association of Canada.

Key messages from the conference:

- Genetic factors have been identified which can protect from excessive consumption. These are seen more commonly in certain ethnic groups.
- There is evidence that alcohol harm reduction interventions can be effective.
- Understanding the basic science has enabled the development of new medications. Some could be tailor made to an individual's gene profile, another may be able to selectively inhibit excessive consumption while leaving moderate consumption unaffected.
- Expectations about the effect that a drink will have influences behaviour. This behaviour is a learned response and can be modified.
- It has been shown that smoking and the desire to drink heavily are linked and further study may lead to treatments to modify both behaviours.

### **ERAB GRANTS**

ERAB invites applications for funding by advertising in relevant medical journals at the beginning of each year. The applications are sent for review to experts in the relevant subject from all over the world. The recommendations as to which grants are funded are based on these peer reviews which give great emphasis to the scientific merit of the application. Grants are funded up to the maximum of  $\leq$  120,000 over, either one, or two years. Of the 21 major grants funded so far seven were completed at the end of 2005, four were completed at the end of 2006, three complete at the end of 2007 and seven will complete at the end of 2008.

While the maximum level of funding available for grants is modest this "seed-corn" funding is important as it can attract higher levels of funding from other bodies. This is indeed the case for at least one of the ERAB grantees who is now in receipt of significant further financial support from the Welcome Trust.

### **RESEARCH HIGHLIGHTS**

ERAB research grants provide funding on any aspect of biomedical or psychosocial research on alcohol (with particular reference to beer) for researchers from established European research institutions. 2007 and 2008 advertisements state that ERAB is particularly encouraging applications for research in the psychosocial field. The areas funded so far include psychosocial, cardiology, genetics, epidemiology, brain and behaviour and liver disease. The results are both positive and negative — the positive results being associated with moderate consumption and the negative largely with excessive consumption.

### **Psychosocial**

- 2 projects examined socio behavioural problems of heavy drinking by young people and violent and aggressive behaviour. Both led to a greater understanding in this complicated field and some have demonstrated the effectiveness of interventions.
- 3 additional projects are looking into social norming methodology for students, alcohol debut age with a view to identifying adolescents at risk of alcohol problems and interventions to reduce alcohol related harm.

#### Cardiology

- **3** projects have concentrated on cardiology and the protective effects of alcohol consumption on cardiovascular risk. They have added even greater weight to the established beneficial effect and are helping to explain some of the mechanisms.
- 1 additional study is examining the polyphenols in beer and wine in a search for new prevention strategies.

#### **Genetics**

 2 projects have used ground breaking gene technology to identify the people most at risk of alcohol problems and how this can be treated.

### **Epidemiology**

• 2 projects have looked at different aspects of risk of cancer. One demonstrated that in general increased risk of disease was not associated with particular drinks. The other challenged the perception that beer may have been causally related to one specific type of cancer.

#### **Brain and Behaviour**

- 2 have examined brain, behaviour and development. Both have helped understand addiction and treatment of people with alcohol problems.
- 3 additional projects in this field are underway. One is exploring a new beneficial effect associated with moderate consumption the formation of new nerve cells. The others are looking at the ways in which heavy maternal alcohol consumption may affect the baby and how damage may be treated and cost effective drug therapy for alcoholics.

#### Liver

 3 studies are currently examining different aspects of alcoholic liver disease and markers for heavy alcohol consumption. It is hoped that these will open the way for novel treatments that will aid recovery and improve survival.

The publications resulting from grants funded are listed at the end of this report.

### **GEOGRAPHICAL SPREAD**

To date ERAB grants have been undertaken in 10 different EU countries.

Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Portugal, Sweden and UK.

# **2007 GRANTS**

At its eighth meeting on 14th November 2007 The ERAB Board of Directors agreed that the following eight research projects should be funded during 2008 / 2009.

Many of these applications examine different aspects of binge drinking which is a subject constantly in the news. A better understanding of why binge drinking takes place and what can be done to reduce its harmful effects will be of significant benefit to the brewing sector.

These include three out of the six psycho-social applications received, (all from the UK); — applications for research in this field were particularly encouraged in the advertisements for this round of applications.

Prof. Laura DELLA CORTE	University Firenze, Italy		
Brain	Molecular and cellular damage induced by binge drinking in adolescents. Can this be diminished by targeted drugs?		
Two year			
Dr Michael LINNEBANK	University Hospital Bonn, Germany		
Brain	The impact of methics in a metabolism for the incidence and the clinical source of cleabel dependency		
Two year	The impact of methionine metabolism for the incidence and the clinical course of alcohol dependency.		
Dr Edwin H. JACOBS	Erasmus University Medical Center, Rotterdam, The Netherlands		
Genetics	The bidirectional relationship between the biological clock and alcohol addiction.		
Two Year			
Mrs Teresa MOREIRA	School of Health and Social Care, Oxford, UK		
Psycho-social	Is brief personalized feedback effective in reducing alcohol-related problems amongst University students in different European countries ?		
Two Year			
Mr Andrew PERCY	Queens University Belfast, UK		
Epidemiology	Extending growth mixture modelling for the longitudinal study of adolescent alcohol use.		
Two year			
Dr Dieter ROSSKOPF	Greifwald, Germany		
Liver	Ethanol modulation of the INSIG /SCAP/SREBP system: roles for the pathogenesis of fatty liver and obesity.		
Two year			
Prof. Ian Paul ALBERY	London South Bank University, UK		
Psycho-social	'Blind Drunk?' Differentiating the psychopharmacological and expectancy effects of alcohol consumption on attentional bias.		
18 months			
Dr Martin HAGGER	University of Nottingham, UK		
	A psychosocial intervention to reduce high-risk single session alcohol (binge) drinking among company		
Psycho-social	A psychosocial intervention to reduce high-risk single session alcohol (binge) drinking among company		

# AWARDS FOR YOUNG RESEARCHERS

As well as providing major research grants ERAB is keen to encourage young researchers to work in this field and offers a number of much smaller travel and exchange awards for researchers under the age of 35. The travel awards enable scientists to travel to conferences to present their data and the exchange awards allow periods of study / collaboration in centres of excellence anywhere in the world.

### **SPONSORSHIP**

ERAB is proud of its continuing commitment to the European Society for Biomedical Research on Alcohol (ESBRA) biennial Congress. In 2005 ERAB sponsored travel awards for the leading young presenters at the conference in Cambridge, UK. In 2007 we funded a keynote speaker for the conference in Berlin, Germany as well as travel awards. This is an important targeted means of communication about ERAB.

### THE ERAB WEBSITE

In 2007 the ERAB website has been redesigned. The result is a lighter more modern site which is much easier to use. It includes information about the members of both Boards, how to apply for a grant and details of grants already funded. An intranet allows the Advisory Board to download the extensive paperwork for their meetings.

The website receives a growing number of visits each year almost 48,000 in 2006. This activity peaks in the Spring when grant applications are due and shows that it is being consulted by the research community.

### **BOARD OF DIRECTORS**

The ERAB's independence is guaranteed by a Board of Directors made up of a majority of public members. Their role is to administer the funds.

### **PUBLIC MEMBERS**

### **Mr Raymond Georis**

Madariaga European Foundation, Belgium

(Founder Member, Chairman)

### **Professor Daniel Bessa**

Escola de Gestão do Porto, Portugal

#### Mr Jean Martin

European Confederation of the Food & Drink Industry, Belgium

### **Professor Mack Mitchell**

ABMRF The Foundation for Alcohol Research, USA

### Mrs Heidrun Piwernetz

Representation of Bavaria to the European Union

### Dr Erik Skovenborg

Medical Doctor, Denmark

### **Professor Philippe De Witte**

Université Catholique de Louvain, Belgium

**Chairman of the ERAB Advisory Board** 

### REPRESENTATIVES OF BREWERS AND TRADE ASSOCIATIONS Mr Ulf Spendrup

President of The Brewers of Europe

#### **Dr David Long**

The British Beer & Pub Association

#### Mr Jacobo Olalla Marañón

Cerveceros de España

### Mr Knud Hedeager Nielsen

Carlsberg

### Mr Kieran Simpson

Scottish & Newcastle

### **HONORARY MEMBERS** (ACCORDING TO ARTICLE 6 OF THE BY-LAWS)

#### **Professor Oliver F W James**

Pro Vice Chancellor, Faculty of Medical Sciences, University of Newcastle upon Tyne, UK

(Founder Member)

#### Mr Piero Perron

Heineken

(Founder Member)

### **Professor Richard Smallwood**

former Commonwealth Chief Medical Officer (1999-2003), Australia

# ADVISORY BOARD

The members of the Advisory Board have a proven international independent scientific reputation. Their role is to examine the applications, suggest peer reviewers and recommend to the Board of Directors which applications should be funded.

### **Professor Philippe De Witte**

Department of Biology, Université Catholique de Louvain, Belgium Chairman

#### **SOCIO-BEHAVIOURAL EXPERTS**

#### Dr Kari Poikolainen

Finnish Foundation for Alcohol Studies, Helsinki, Finland

#### **BIO-MEDICAL EXPERTS**

### **Professor Christopher P. Day**

Centre for Liver Research, University of Newcastle upon Tyne, UK

### **Professor Giovanni Addolorato**

Department of Internal Medicine,

Università Cattolica del Sacro Cuore, Rome, Italy

### **Professor Wolfgang Koenig**

Department of Medicine, University of Ulm, Germany

### Dr Martje P. Weijenberg

Department of Epidemiology, Maastricht University, The Netherlands

# **PUBLICATIONS**

The ERAB encourages its grantees to publish their research findings in peer reviewed journals. Peer review of publications has been shown to be an effective mechanism for assuring quality and independence in science. This can be a lengthy process and the following list includes all publications citing ERAB as a source of funding to date. So far all relate to the first years grants.

Altieri A, Garavello W, Bosetti C, **Gallus S**, La Vecchia C (2005) Alcohol consumption and risk of laryngeal cancer. Oral Oncology, 41:956-965.

Altieri A, Bosetti C, **Gallus S**, Franceschi S, Dal Maso L, Talamini R, Levi F, Negri E, Rodriguez T, La Vecchia C (2004) Wine, beer and spirits and risk of oral and pharyngeal cancer: a case-control study from Italy and Switzerland. Oral Oncology, 40:904-909.

Augustin LSA, **Gallus S**, Tavani A, Bosetti C, Negri E, La Vecchia C (2004) Alcohol consumption and acute myocardial infarction: a benefit of alcohol consumed with meals? Epidemiology, 15(6):767

Beale GS, Miel L, Abate ML, Bugianesi E, **Reeves HL**, Day CP (2007) Differential expression of GSTT1 and GSTT2 is associated with more advanced fibrosis in patients with NAFLD. Journal of Hepatology, suppl. 1, 46; S264.

**Beulens** JWJ, Rimm EB, Ascherio A, Spiegelman D, Hendriks HFJ, Mukamal KJ (2007) Alcohol consumption and risk for coronary heart disease among men with hypertension. Annals of Internal Medicine, 146:10-19.

Bongaerts BWC, de Goeij AFPM, Goldbohm RA, van den Brandt PA, **Weijenberg MP** (2006) Alcohol and distinct pathways to colorectal cancer. European Journal of Epidemiology, 21(S):48.

Bongaerts BWC, de Goeij AFPM, van den Brandt PA, **Weijenberg MP** (2006) Alcohol and the risk of colon and rectal cancer with mutations in the K-ras gene. Alcohol, 38:147-154.

Bongaerts BWC, de Goeij AFPM, van den Brandt PA, Goldbohm RA, **Weijenberg MP** (2005) Associations between alcohol consumption and the risk of sporadic colorectal cancer with or without K-ras oncogene mutations. In: Aarts J, ed. Preventie & Interventie: 30e WEON Symposium, Programma en abstracts, 2 & 3 juni2005, WICC, Wageningen: Wageningen: Vereniging voor Epidemiologie (VvE), 40.

Bongaerts BWC, de Goeij AFPM, Goldbohm RA, van den Brandt PA, **Weijenberg MP** (2005) Associations between alcohol consumption and the risk of sporadic colorectal cancer with or without K-ras gene mutations. Alcohol and Alcoholism, 40(S1):i14-i15.

Crispo A, Talamini R, **Gallus S**, Negri E, Gallo A, Bosetti C, La Vecchia C, Dal Maso L, Montella M (2004) Alcohol and the risk of prostate cancer and benign prostatic hyperplasia. Urology, 64:717-722.

Fowler T, Lifford K, Shelton K, Rice F, Thapar A, Neale MC, McBride A, **van den Bree M** (2007) Exploring the relationship between genetic and environmental influences on initiation and progression of substance use. Addiction, 101:413-422.

Fowler T, Shelton K, Lifford K, Rice F, McBride A, Nikolov I, Neale MC, Harold G, Thapar A, **van den Bree M** (2007) Genetic and environmental influences on the relationship between peer alcohol use and own alcohol use in adolescents. Addiction, 102:894-903.

Garavello W, Bosetti C, **Gallus S**, Dal Maso L, Negri E, Franceschi S, La Vecchia C (2006) Type of alcoholic beverage and the risk of laryngeal cancer. European Journal of Cancer Prevention, 15:69-73.

Kashkin V, **De Witte P** (2005) Nicotine increases microdialysate brain amino acid concentrations and induces conditioned place preference. European Neuro-Psychopharmacology, 15:625-632.

Lallemand F, Ward RJ, Dravolina O, **De Witte P** (2006) Nicotine-induced changes of glutamate and arginine in naïve and chronically alcoholized rats: an in vivo microdialysis study. Brain Research, 1111:48-60.

Naldi L, **Gallus S**, Tavani A, Imberti GL, La Vecchia C (2004) Risk of melanoma and vitamin A, coffee and alcohol: a case-control study from Italy. European Journal of Cancer Prevention, 13:503-508.

Negri E, La Vecchia C, Pelucchi C, Tavani A (2005) The risk of acute myocardial infarction after stopping drinking. Preventive Medicine, 40:725-728. (**S. Gallus** team)

Shelton K, Lifford K, Fowler T, Rice F, Neale M, Harold G, Thapar A, **van den Bree M** (2007) The association between conduct problems and the initiation and progression of marijuana use during adolescence: a genetic analysis across time. Behavior Genetics, 37(2):314-325.

Van den Bree MBM, Rice F, Fowler TA, Shelton KH, Lifford KJ Scourfield J, Harold Gordon T, Thapar A (2007) The Cardiff study of all Wales and North West of England twins (CaStNET): a longitudinal research program of child and adolescent development. Twin Research and Human Genetic, 10(1):13-23.



Janet Witheridge Secretary-General, ERAB November 2007

Registered Office European Research Advisory Board

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