We all are looking forward to the 2005 annual SSIB meeting in Pittsburgh, PA (July 12-17, 2005). Located at the confluence of three major rivers and banked on all sides by green hills, Pittsburgh has enjoyed an amazing modern renaissance, which has truly reinvented the city and its riverfront. If you haven’t been to Pittsburgh in the last five years, you haven’t been to Pittsburgh! The new Pittsburgh has more great restaurants, nightlife and downtown cultural venues than any other city its size in the country. The Pittsburgh International Airport is consistently rated one of the best airports in the world for its shopping, connections and passenger flow. With more than 600 non-stop flights per day from 118 cities in North America and Europe, you will have easy access to the SSIB meeting.

Pittsburgh is a very friendly and affordable city. You’re going to love our compact, easily walkable downtown, and you’ll appreciate the convenience of America’s shortest, cleanest subway that will whisk you under the river from our meeting site at the Sheraton Station Square Hotel to the downtown city, with multiple venues for entertainment, nightlife, cruises, and miles and miles of riverfront trails for morning jogs or evening strolls.

Extend your stay and enjoy a variety of outdoor activities. The Pittsburgh region offers more than 100 public golf courses, as well as mountain biking, whitewater rafting and more, all within a short drive from downtown Pittsburgh.

Hospitality abounds in Pittsburgh’s diverse ethnic neighborhoods, offering visitors a sampling of food and culture inspired and influenced by the city’s history and ethnic heritage. Downtown, a thriving Cultural District offers performances by the world-class ...
Environment and enrichment in rodent studies of ingestive behavior

By Neil Rowland
Department of Psychology, University of Florida

National and international animal welfare standards, most usually enforced in the USA by Institutional Animal Care and Use Committees (IACUCs), regard the single housing of normally social animals like rats or mice to be stressful and require scientific justification. Among the most used standards are those proposed in the Guide for the Care and Use of Laboratory Animals (1996). In this regard, the Guide (page 26) quotes from Brain & Bention (1979): “Whenever it is appropriate, social animals should be housed in pairs or groups, rather than individually, provided that such housing is not contraindicated by the protocol in question and does not pose an undue risk to the animals”.

Many studies of feeding and drinking behavior use singly housed rodents. There are important scientific grounds for this, including:

- a necessity of collecting individual data and/or use of automated devices
- group housing may lead to establishment of social hierarchies and individual differences that, although interesting, are not the immediate scientific objective
- if food or fluid restriction is involved, group housed rodents (especially males) may start fighting.

In accordance with the Guide, IACUCs usually will understand and approve the need for single housing, at least for the necessary duration of the experiment. Further, while some studies can use the solid-bottom plastic tub-style enclosures with bedding in the cage, this often interferes with measures of ingestive behavior because food spillage is hard to quantify and/or food or fluid become spoiled with bedding. Thus, some studies are better performed in cages with non-solid floors (usually stainless steel mesh or rods) and this type of non-standard housing also often requires additional justification.

Given these evolving concerns about rodent social and housing conditions, a question that is receiving increasing attention concerns provision of environmental enrichment (EE) especially for singly housed rodents. Several commercial as well as inexpensive home-made EE options are now available (Key, 2004). Some strains of obese rodents, notably those that develop diabetes, pose additional concerns for husbandry and EE in regard to feeding and metabolism (Good, 2005). Good’s article includes a demonstration picture of a mouse housed singly in a wire grid cage but containing a PVC pipe and ‘Nestlet’ pad. This might be very appropriate in some studies but might be a confounding factor in metabolic work, including urine collection. Provision of plastic shelters like PVC pipes or ‘igloos’ may decrease energy expenditure, while exercise devices like wheels will increase expenditure, and indirectly may alter food or fluid intake (Borer et al 1988; Irani et al 2005).

Most investigators of ingestive behavior either purchase or raise animals to study in young adulthood, and these animals are invariably raised in social groups. They then either continue group housing or are individually housed, with or without EE, for the behavioral studies. The key question is whether the use of EE affects the science. Some learning and exploration tasks in mice have been reported to be unaffected by group housing mice in either standard small cages or enriched larger cages (Wolfer et al 2004). Moons et al (2004) reported that food and water intake of EE mice did not differ from non-enriched. In contrast, Van de Weerd et al (1997) found that the food intake of group housed mice of both the BALB/c and C57BL strains was reduced significantly (by up to 10%, P<0.01) in groups whose cages contained paper nesting material as EE. However, the body weight gain was identical in EE and non-EE mice of the same strain and sex. This suggests that a metabolic savings was afforded by nesting material over and above that provided by the standard bedding.

Because the available literature for ingestive behavior seems to be sparse, especially in regard to EE in singly housed animals as well as differences between species and/or strains, it would be helpful for SSIB members who have either formal or informal data relevant to this issue to share their data and concerns. Those individuals having specific environmental innovations, comparison data, relevant articles, or just opinions, are invited to e-mail them to me (nrowland@ufl.edu). If there is sufficient interest, I will report the responses in a future issue of INTAKE.

Editors note: To download a complete copy of this article including references, please visit the supplemental online material for this issue of INTAKE (Vol 17, no 1) at http://www.ssib.org/newsletter.html
Epstein and Lifetime Achievement Awards Announced

The Alan N. Epstein Research Award honors an individual for a specific research discovery that has advanced the understanding of ingestive behavior. Members of SSIB who are less than 15 years beyond the date of their highest degree are eligible.

This year’s recipient, Kevin Grove, earned his Ph.D. from Washington State University in 1994. Dr. Grove has since identified important problems for study, applied sophisticated techniques and developed new concepts about the organization of hypothalamic peptide signaling. He is honored with the Epstein Award specifically for his work on the development of NPY circuitry. Dr. Grove and his colleagues were the first to demonstrate and characterize the presence of novel NPY mRNA expression in the dorsomedial hypothalamic and the paraventricular nucleus at times during postnatal development. This important work is just beginning to enjoy the recognition it deserves. Kevin manages to accomplish all this while being one of the nicest guys in the field.

Congratulations Dr. Grove!

The Distinguished Career Award honors an individual for accomplishments in, and contributions to the understanding of ingestive behavior. The award is made to a senior investigator who has retired from his/her academic position, or will be retired the time of the award.

Erwin Scharrer’s extraordinarily broad knowledge in general and comparative physiology allowed him to conceptualize things and to take an integrative and comparative approach to problems long before “integrative” and “systems biology” became buzz words. He has tackled questions from many different viewpoints, combining behavior with anatomy, physiology, endocrinology and metabolism; and his position for much of his career as a Professor of Physiology in a veterinary university allowed him to include comparative approaches to all of his findings. Dr. Scharrer's longtime interest and use of spontaneous feeding methodology and of electrophysiology also set him at the forefront of scholars in ingestive behavior. His research aside, perhaps the greatest contribution Dr. Scharrer has made to the field of ingestive behavior is the trainees he has mentored. Included on an impressive list over the years are two SSIB Presidents (Nori Geary and Wolfgang Langhans) as well as Thomas Lutz. Congratulations Dr. Scharrer!

NIH Symposium: “Ghrelin and Eating Disorders”

The NIH Symposium for the Annual Meeting of SSIB in Pittsburgh will be on “Ghrelin and Eating Disorders.” The symposium was organized by Dr. Allan Geliebter, Obesity Research Center, St. Luke’s-Roosevelt Hospital and Columbia University College of Physicians and Surgeons.

 Barely more than five years ago, the peptide ghrelin was identified as a peripheral physiological hormone that stimulates eating. Our understanding of the distribution of ghrelin, the mechanisms for its actions, and its potential roles in physiology has expanded dramatically since then. This symposium will cover central and peripheral mechanisms of ghrelin action and will translate basic findings from animal models to humans to help explain both normal and abnormal eating behaviors that can lead to extremes of body weight. Exciting research findings and interdisciplinary perspectives from endocrinology, psychology, and psychiatry will be reviewed that link ghrelin with eating disorders and obesity and offer promising pharmacological treatments.

Congratulations to the 2005 SSIB Young Investigator Travel Award Recipients:

- Manuela Lejeune, Ph.D., postdoctoral fellow, Maastricht University
- Astrid Smeets, Ph.D. student, Maastricht University
- Jacquelen Hillebrand, Ph.D., postdoctoral fellow, Rudolf Magnus Institute of Neuroscience, University Medical Center, Utrecht
- Graham Finlayson, Ph.D. student, University of Leeds
- Paula Chandler, Ph.D. student, University of Alabama at Birmingham
- Sarah Teegarden, Ph.D. student, University of Pennsylvania

Graduate student Mardi S. Byerly of the Neuroscience and Cognitive Science program at the University of Maryland, College Park, has been awarded the Cosmos Club Foundation Research Grant. Her mentor is Dr. Tom E. Porter.

In 2004, Dr. Martin J Binder received the Teacher of the Year Award from the Dept Psychiatry and Human Behavior School of Medicine, Univ Calf Irvine and an award for Outstanding Contributions from the Association of the Clinical Faculty.

Dr. Bart Hoebel received the Distinguished Scientist Lecturer Award from the American Psychological Association, and will speak at the Western Psychological Association meeting held in Portland OR.
Article continued from the front page

PIZZA ROSETTA, Pittsburgh Symphony Orchestra, Pittsburgh Ballet Theater, Broadway Series and Pittsburgh Opera, while the city’s jazz legacy is preserved and enhanced at Manchester Craftsmen’s Guild and various clubs throughout the area.

In the Strip District (named for its geography, not for its dancers), the clubs are hot, the food is spicy, and dance floors pulse to the sounds of rock, blues, jazz and swing. Award-winning brewpubs serve up the finest lagers and ales, while classic Pittsburgh fare is featured at nearby diners. By day, the Strip is alive with street vendors and shoppers buying the freshest breads, pastries, cheeses, coffees and ethnic specialties.

From downtown, a short walk across one of Pittsburgh’s many bridges takes you to the North Side, where you can experience the work of the pop art prince and Pittsburgh native Andy Warhol at The Andy Warhol Museum, the most comprehensive single-artist museum in the world. Another North Side “must see” for adults and children is the Carnegie Science Center, an interactive amusement park for the mind, which features over 250 hands-on exhibits, including the largest science and sports exhibition in the world.

Located just 10 minutes from downtown, Oakland (home of the University of Pittsburgh) affords a number of attractions and experiences. Enjoy one of the finest dinosaur exhibits in the world at the Carnegie Museum of Natural History, or visit an outstanding collection of Impressionist and post Impressionist works at the Carnegie Museum of Art. Nearby, the sensual delights of flowers and butterflies at the 107-year-old Phipps Conservatory and Botanical Gardens surprise and delight visitors from around the world.

Just across the river on Pittsburgh’s North Shore you’ll find PNC Park, the new home of the Pittsburgh Pirates. This 38,000-seat classic baseball stadium has been designed with masonry arches, a terra cotta front, and a center field that opens to a dramatic view of Pittsburgh’s skyline.

We have the foundation for an excellent event in 2005. Pittsburgh is a city on the move, and a location that promises to exceed expectations. Here’s looking forward to a great 2005 SSIB meeting in Pittsburgh!

Very successful in Quebec, “Nourrir son cerveau. Manger intelligemment” published by Les Editions de l’Homme (2004) is now receiving a lot of attention in France, Belgium and Switzerland. It was also nominated for a Canadian Prize (Cuisine Canada and Guelph University) for the category of “Best book of special interest in nutrition”. This book explores and explains the effects of nutrition on brain development, brain chemistry and ultimately behavior by using the true story of a courtroom drama. Eating the right foods helps maintain a healthy body. However, certain foods play an equally important role in our mental well-being. They can have an impact on sleep, personality, intelligence and even criminal activity. To illustrate this point, I tell the surprising tale of the Dan White court case whose verdict made history. The fallout of this affair brought to light the role that malnutrition may play in certain criminal behaviors as well as how sensitive the brain is to food. Whether it brings apathy or euphoria, stress or serenity, all one needs to know is how food influences the brain in order to transform one’s meals into a curative treatment for the soul. Understanding the way food acts on the brain allows us to improve memory, effectively combat stress and fatigue or even control appetite but the author warns the reader that there are limitations. Putting theory into practice, the author also presents delicious recipes as well as menus to fulfill all of your brain’s needs day after day.

Book Report by Louise Thibault

Very successful in Quebec, “Nourrir son cerveau. Manger intelligemment” published by Les Editions de l’Homme (2004) is now receiving a lot of attention in France, Belgium and Switzerland. It was also nominated for a Canadian Prize (Cuisine Canada and Guelph University) for the category of “Best book of special interest in nutrition”. This book explores and explains the effects of nutrition on brain development, brain chemistry and ultimately behavior by using the true story of a courtroom drama. Eating the right foods helps maintain a healthy body. However, certain foods play an equally important role in our mental well-being. They can have an impact on sleep, personality, intelligence and even criminal activity. To illustrate this point, I tell the surprising tale of the Dan White court case whose verdict made history. The fallout of this affair brought to light the role that malnutrition may play in certain criminal behaviors as well as how sensitive the brain is to food. Whether it brings apathy or euphoria, stress or serenity, all one needs to know is how food influences the brain in order to transform one’s meals into a curative treatment for the soul. Understanding the way food acts on the brain allows us to improve memory, effectively combat stress and fatigue or even control appetite but the author warns the reader that there are limitations. Putting theory into practice, the author also presents delicious recipes as well as menus to fulfill all of your brain’s needs day after day.
Chartered Riverboat Dinner Cruise

The local organizers in Pittsburgh, Drs. Linda Rinaman and Ed Stricker have arranged for an optional group event for SSIB meeting attendees – a riverboat cruise!

Come aboard for a sumptuous meal with a spectacular view. Riverboat cruises are a fantastic way to enjoy great food, a cash bar, and a tour of Pittsburgh from the splendor of the Three Rivers. Be sure to bring your appetite!

Details for the Riverboat Cruise:

The cruise will take place on Thursday evening, July 14, 2005. The boat will board at 6:30 PM and set sail at 7:00 for a 3 hour tour of the three rivers, returning at 10:00 PM. The cost is $45.00 per person.

The company providing the tour is Gateway Clipper:

However, tickets must be purchased in advance by credit card via the SSIB website. The reservation deadline is May 10, 2005. Note: The cruise will be cancelled and refunds issued if fewer than 100 tickets are sold. Please contact Linda Rinaman for additional information (Rinaman@pitt.edu)

Cruise Info: http://www.ssib.org/pitts05.htm#Cruise
To purchase tickets: http://www.ssib.org/paymentpagessib.htm.

A Message from the President: SSIB Economics by Wolfgang Langhans

In the November issue of “INTAKE” I presented some measures that the Board and I considered necessary to consolidate our financial situation and to prepare SSIB for the future. Today I gladly report that some of these measures are beginning to take effect. You have all received the results of the vote on our dues structure and the dues notice for this year. As you know, a large majority of the voting members followed the Board’s suggestion and approved the proposed raise in dues (from USD 10 and 65 for students and regular members, respectively, to USD 25 and 100) and to introduce a new Post-Doc category with dues of USD 50 a year. This moderate increase will help us a lot, and I very much thank all of you who voted for it. I guarantee that we will use the money efficiently, and that we will do what we can to keep our annual running costs as low as possible.

Thanks to the great efforts of Drs. Linda Rinaman and Ed Stricker, the budget for the Pittsburgh Meeting is sound and balanced. Clearly, the newly established Meeting Planning Committee (see “Addenda to last Board Meeting” on the web) works well. I actually think it is the first time that officers of the Society, Marianne and the local organizers discussed all financial arrangements and implications of an upcoming meeting so thoroughly. I firmly believe it should continue to be that way in the future, and the functioning of the Meeting Planning Committee is of course absolutely essential for meetings without a local host, such as next year’s meeting in Florida.

In late January and early February, I sent solicitation letters to more than 60 companies, including all our previous donors. The Board and a few other society members joined me in these efforts; (continued on page 6)
A Message from the President (continued)

(continued from page 5); the idea is to establish a donor list that can be maintained and continuously updated by future Presidents and Board Members. We do already have positive responses from several previous donors, and one even increased their contributions substantially compared to last year. I hope of course that our efforts will continue to be successful, in particular for the benefit of our New Investigators. Needless to mention, we will appropriately recognize all contributions and thank our sponsors at the meeting and in any printed material that is related to it.

I want to take this opportunity and thank all current Board Members for their willingness to take on more responsibilities for Society matters than in former times. In this context I am also pleased to announce that 14 people will run for the three seats on the Board (plus the New Investigator Representative) that become available this year. I take this as a good sign for the future and trust that all candidates are also willing to regularly attend the Board Meetings and to play an active role in shaping the future of our Society.

Identification with the Society and engagement in its affairs are necessary if we want to move ahead and to achieve our goal of becoming the leading international Society dealing with ingestive behavior and all its related aspects.

I trust that by now everybody has seen our new appearance on the web. I like the new website a lot and I think Marianne did a great job designing it. Thank you! To establish and maintain this website is just one of Marianne’s many time-consuming tasks in the Central Office. You have also noticed that all abstracts are available on the web. Opinion may be somewhat divided about making the abstracts publicly available so early. Several people told me, however, they are strongly in favor of posting the abstracts on the web, hoping that this will attract people to the Annual Meeting who have not submitted an abstract. We will see how it works and certainly discuss this issue at the next Board Meeting. As you have also noticed, our new, official logo is now prominently featured on the website, and it even appears on the hotel reservation site. I hope you like our new logo because you will encounter it in many places during the upcoming meeting!

The most important aspect of our Annual Meeting is of course the scientific program. Hans-Rudi and the Program Committee are probably working on it while you read this, and my impression is that the program is going to be terrific. The preliminary version will soon be available on the web. For today I am proud to announce the four Masterfoods Keynote speakers, who have accepted our invitation. These are (prospective titles): Sadaf Farooqi (Regulation of appetite in humans - insights from genetics), Donald Pfaff (Mechanisms for generalized and specific motivational forces underlying ingestive and reproductive behaviors), Barbara Rolls (Satiety: is it the missing ingredient in weight management?), and Paul Trayhurn (Signals from Fat - Adipose Tissue as the Metabolic Epicentre of Obesity). I trust you will agree with me that the Masterfoods lectures will once again be highlights of our Annual Meeting and will be another reason bringing you to Pittsburgh.

Conference on Food Choice in April

An announcement from David Booth and Suzanne Higgs:

The multidisciplinary international Conference on Food Choice will be meeting next year with the annual meeting of the British Feeding and Drinking Group on the campus of the University of Birmingham (England) on 19-22 April 2006.

To register interest now and to see further details in due course, go to:

http://www.bfdg.bham.ac.uk/FCC.htm
Post-Doctoral Fellowships in Obesity Research

Clinical Nutrition Research Center (CNRC) at the University of Alabama at Birmingham announces the availability of post-doctoral fellowships. Positions entail working collaboratively with an interdisciplinary group of scientists. The CNRC studies virtually all aspects of obesity ranging from molecular biology to epidemiology. Investigators include molecular biologists, physicians, psychologists, statisticians, physiologists, epidemiologists, and nutritionists.

Individuals with a doctoral degree from any scientific field are eligible. Women, individuals from traditionally disadvantaged groups, and individuals with disabilities are encouraged to apply. US citizenship or permanent resident status is NOT required, but US citizenship or permanent residents are given priority consideration.

Interested individuals should contact David B. Allison at the phone, fax, or email listed to the right.

David B. Allison, Ph.D.
Professor
Department of Biostatistics & Clinical Nutrition Research Center
Ryals Public Health Building, Suite 327
University of Alabama at Birmingham
1665 University Avenue
Birmingham, Alabama 35294
Phone: 205-975-9169
Fax: 205-975-2540
Email: Dallison@UAB.edu

NIH-Funded Postdoctoral Fellowship Fluid and Electrolyte Balance

A position is immediately available to study the cellular and behavioral mechanisms underlying fluid and electrolyte balance. A range of projects are available including the application of RNA interference to study tachykinin receptor involvement in vasopressin release and salt intake, confocal microscopy to follow receptor trafficking in brain during hyperosmolarity and hypovolemia, and the effects of in utero sodium exposure on mature brain function and ingestive behavior. Applicants must have a Ph.D. or equivalent in Neuroscience or a related field, and superior communication skills in English. We seek individuals with a strong background in one or more of the following areas: behavioral neuroscience, cell biology, confocal or transmission electron microscopy. The University of Wyoming is located 2 hours from Denver, Colorado and is positioned between two mountain ranges, providing opportunity for a variety of outdoor activities. The fellow will have the opportunity to interact with faculty and students in the NIH funded Neuroscience Center, and will have ready access to the Microscopy and Macromolecular Analytic CORE facilities. Salary will be commensurate with NIH guidelines.

Interested applicants should send a cover letter, curriculum vitae, and the names and contact information of three references. Send this material to Dr. Flynn (right).

Francis W. Flynn, Ph.D.
Neuroscience Program, Department 3166
University Station
University of Wyoming, Laramie, WY 82071
USA. Fax 307-766-5625
Flynn@uwyo.edu

NIH-FUNDED POSTDOCTORAL RESEARCH FELLOWSHIP IN OBESITY

Fellowship involves helping manage two ongoing NIH-funded research projects on obesity prevention. Both projects focus on changing aspects of the nutritional environment to prevent weight gain or weight regain. One is a controlled trial of weight gain prevention in a worksite cafeteria, and the other is a study of weight loss maintenance in overweight primary care patients. Interests or background in nutrition, eating disorders, or biological bases of obesity-proneness desirable but not essential. Position will involve a combination of project leadership, data analysis, manuscript preparation, and grant writing. Numerous opportunities exist for publications. App. is a 12-month, F/T position with one-year renewal possible; starting date is open but ASAP after Feb. 1. Salary in the 34-38K range with benefits. Applicants should have a Ph.D. in clinical or health psychology with a substantive research background in obesity. Send a vita, a statement of research interests and experience, and three letters of reference by Jan 15. Drexel University strongly encourages applicants from minorities and women, and is an Equal Opportunity/Affirmative Action Employer.

Michael R. Lowe, Ph.D.
Dept. of Psychology
Drexel University,
Mail Stop 626
245 N. 15th St.
Philadelphia, PA 19102-1192
e-mail to
lowe@drexel.edu
Postdoctoral Research Associate

A NIH-funded postdoctoral research associate position is available to begin immediately to study the regulation of body fat, especially the role of the sympathetic and sensory innervation of white adipose tissue. A wide variety of techniques will be used: neuro-anatomical (viral tract tracing, in situ hybridization, immunocytochemistry and their combinations), molecular (real time PCR), surgical (toxin & microsurgical sympathetic and sensory denervation, lipectomy, fat transplantation, microknife cut/conventional/toxin/viral brain lesioning, intracranial microinjection), neurochemical (HPLC with electrochemical detection), adipose tissue (cellularity, immunocytochemistry, gene expression, receptor-binding and carcass composition), radioimmunoassay and spectrofluorometric/photometric assay (circulating hormones, metabolic fuels) and behavior (food intake). Several obesity models are used especially seasonal (photoperiod-induced in hamsters), but also genetic and dietary. The successful applicant will be expected to develop their own related projects as well as working on existing research themes. Competitive salary based on experience. Interested applicants should have some background in neuroscience and/or physiology and should send a CV, a short statement of their research interests/experience and the names and contact information of three references to: Dr. Timothy Bartness, Dept of Biology, 24 Peachtree Ctr Ave NE, Atlanta, GA, 30302-4010 bartness@gsu.edu.

Postdoctoral Position: Behavioral Genetics

A postdoctoral position is available in the laboratories of Drs. A.A. Bachmanov and G.K. Beauchamp at the Monell Chemical Senses Center (http://www.monell.org) to study the genetics of taste, ingestive behavior and alcohol consumption in the mouse. The projects are focused on positional identification of genes and involve construction of interval-specific congenic strains. Experience with animal breeding, behavioral phenotyping, genotyping, and linkage analysis is highly desirable. The Monell Chemical Senses Center is on the campus of the University of Pennsylvania with access to its state-of-the-art core facilities. The Center is also close to central Philadelphia and its rich intellectual and cultural environment. Monell is an equal opportunities employer and encourages applications from women and underrepresented minorities. Send curriculum vitae, and the names and addresses of three references to: Dr. Alexander Bachmanov, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, PA 19104-3308 FAX: 215-898-2084 bachmanov@monell.org.

RESEARCH FELLOW. The University Of Liverpool, England

A postdoctoral scientist is sought to join an internationally recognised group researching the role of endogenous cannabinoids in appetite and body weight regulation. The position is funded by the BBSRC in collaboration with an industrial partner, and is available immediately for 2 years. Salary will be in the range: £19,460 - £24,820 pa. The project entails the use of in vivo microdialysis and behavioural models to assess brain cannabinoid activity in relation to circadian feeding patterns and incentive-reward processes. Specific experience of microdialysis techniques would be an advantage, but is not essential. However, applicants should ideally have a background in behavioural pharmacology. Experience of the experimental analysis of feeding or motivational mechanisms would be an advantage. The project seeks to advance our understanding of the role of the endocannabinoids in the control of appetite building upon our work on the central CB1 cannabinoid receptor. Informal enquiries to Professor Tim Kirkham, School of Psychology. Email: t.c.kirkham@liv.ac.uk. Tel.: +44 (0)151 794 6706. For the complete text of this ad please view the SSIB jobs site online, or www.liv.ac.uk/university/jobs.html Quote Ref B/460 Closing Date: 12 April 2005.