

versitas friburgensi



Université Unice



University of Zurich

Affect & Emotion

is the newsletter of the NCCR Affective Sciences, a research centre for the interdisciplinary study of human emotion The National Centres of Competence in Research (NCCR) are a research instrument of the Swiss National Science Foundation

The NCCR Affective Sciences is hosted by the Université de Genève Centre Interfacultaire en Sciences Affectives 7, rue des Battoirs - 1205 Genève - Switzerland tel: (+41) 22 379 98 00 fax: (+41) 22 379 98 44

Editor: carole.varone@unige.ch

For further information on our work, see our website www.affective-sciences.org

Affect & Emotion **Newsletter of the NCCR Affective Sciences**

SPECIAL **ISSUE**

EDITORIAL



ished its first phase of funding (2005-2009) with flying colours. The 10 eminent scientists of the international review panel judged the quality of the research in the Centre as very high, suggesting that the NCCR had "achieved an international reputation as a uniquely interdisciplinary centre for the study of affect". Based on these achievements, the Swiss National Science Foundation and the Ministry of Education renewed funding for another 4-year period (2009 to 2013). The NCCR in the Affective Sciences also made a giant step forward with the establishment of its home institution, the Centre Interdisciplinaire en Sciences Affectives (CISA), as a "pôle d'excellence" at the University of Geneva. A major agreement with the Canton will allow the creation of a number of professorships in emotion research in collaboration with the different faculties at the university. Multiple efforts are underway to establish and institutionalize an unprecedented concentration of research and training in this new multidisciplinary domain. CISA is already the home institution for a number of large scale research projects, like an Advanced Grant from the European Research Council and a 5-year research unit on emotion and odour in collaboration with a leading fragrance manufacturer. Thus, the Centre starts its second 4-year phase under very positive auspices. Successful instruments like the interdisciplinary Research Foci and the Methods Development program (judged by

PUBLICATIONS

PAGE 2

2009-2013

SECOND

PHASE

Тне

RESEARCH FOCUS

The emotionally expressive powers of music by Dr. Thomas Cochrane PAGE 3





The Affective Sciences are coming of age. At least in their Swiss instantiation. The National Centre of Competence in Research (NCCR) for the Affective Sciences has finthe panel as having produced a "unique and unusually wide array of innovative methodological and measurement contributions"), will be continued with renewed vigour. International networking can be expected to yield excellent results for collaborative research and training activities, especially our International Summer School in the Affective Sciences (ISSAS), which enjoyed a very successful start last year. Strong attention will continue to be devoted to the Education and Training program, the advancement of women, and our popular knowledge transfer activities with museums, art and music schools and festivals, private and public institutions, and the media. New policies include incentive and start-up funding for novel interdisciplinary projects, visiting professorships for promising junior scientists, and the hosting of scientists who choose the centre as base for their excellence fellowships and research projects.

We believe that the reason for the unprecedented interdisciplinary research and teaching activity generated by the centre is its topic - emotion. As expected, this fundamental aspect of human experience has revealed its potential to bring together scientific perspectives generally considered to be worlds apart. The yields require hard sustained work and a healthy dose of enthusiasm, as well as certain tolerance for frustration and an ability to deal with complexity. Unfortunately, much of modern science, privileging rapid output, standard paradigms, simple but flashy take-home messages, and high impact on specialized interest groups, does not immediately reward the interdisciplinary toil. However, we remain convinced that, in the end, a better understanding of the mechanisms underlying emotion and its effects on human behaviour, social interaction and culture will prove its sustainability Prof. Klaus R. Scherer, Director



Research projects at a glance

News

- Events
- Achievements

UNIVERSITÉ

DE GENÈVE

Staff

PAGE 4-5

PAGE 6-7







Publications

Bänziger, T., Grandjean,

neural circuitry of a broken promise. 638. Neuron, 64(5), 756-770.

Brosch, T., Grandjean, D., Sander, D., & Scherer, K. R. (2009). Cross-modal emotional attention: Affective prosody modulates early sensory stages of visual processing in the cross-modal dot probe task. Journal of Cognitive Neuroscience, 21(9), 1670–1679.

Cristinzio, C., N'diaye, K., Seeck, M., Vuilleumier, P., & Sander, D. (2010). Integration of gaze direction and facial expression in patients with unilateral amygdala damage. *Brain*, 133(1), 248-261.

Delplanque, S., Grandjean, D., Chrea, C., Coppin, G., Aymard, L., Cayeux, I., Margot, C., Velazco, M. I., Sander, D., & Scherer, K. R. (2009). Sequential unfolding of novelty and pleasantness appraisals of odors: Evidence from facial electromyography and autonomic reactions. *Emotion*, 9(3), 316-328.

Deonna, J. A., & Scherer, K. R. (2010). The case of the disappearing intentional object: Constraints on a definition of emotion. *Emotion*, 2, 44–52.

Deonna, J. A., & Teroni, F. (2009a). Emotion, corps et valeur. Revue Européenne *de Sciences Sociales, 47*(144), 25-41.

Deonna, J. A., & Teroni, F. (2009b). Taking affective explanations to heart. Social *Science Information*, *48*(3), 359-377.

Deonna, J. A., & Teroni, F. (2009c). The self of shame. In M. Salmela & V. Mayer, (Eds.), Emotion, Ethics and Authenticity (pp.33-50). Consciousness and Emotion Book Series 5. Amsterdam: John Benjamins Publishing Company.

Ethofer, T., Van De Ville, D., Scherer, K. R., & Vuilleumier, P. (2009). Decoding of emotional information in voice-sensitive cortices. Current Biology, 19(12), 1028-1033.

D., Gomez, J.-M., & Van der Linden, M. Mulligan, K. (2009b). Values. In R. & Scherer, K. R. (2009). Emotion recogni- (2009). Impulsivité et difficultés de Poidevin, P. Simons, A. McGonigal & R. tion from expressions in face, voice, and régulation émotionnelle et de gestion body: The Multimodal Emotion Recogni- des relations sociales chez l'enfant et tion Test (MERT). *Emotion*, 9(5), 691-704. l'adolescent. *Développements*, 2, 27-34.

Baumgartner, T., Fischbacher, U., Feiera- Lombardo, P. (2009a). Edgar Poe: Le sentibend, A., Lutz, K., & Fehr, E. (2009). The ment et l'intellect. Critique, 745-746, 625-

> Lombardo, P. (2009b). Littérature comme connaissance chez Stendhal. Études de Langue et Littératures françaises, 94, 107-118.

Lombardo, P. (2009c). Proust, Ruskin et les métamorphoses de Venise. In B. Brun, M. Oguro & K. Yoshikawa (Eds.), Marcel Proust 7 Lettres Modernes Minard.

Lombardo, P. (2010). La Signature au cinéma. Critique, 752-753, 145-157.

Lombardo, P. (2010). L'idéal du dépouillement chez Flaubert et Taine. In M. A. Terzoli, A. A. Rosa & G. Inglese (Eds.), Letteratura e filologia-Studi in onore di Guglielmo Gorni (pp. 103-112). Rome: Edizioni di Storia e Sander, D., & Scherer, K. R. (Eds.). (2009b). letteratura.

Lombardo, P. (2010). Literary scandals: Flaubert and Baudelaire. In R. Cabotti (Ed.), Scandali. Atti di Synapsis 2007 (pp. 106-116). Florence: Le Monnier.

Lombardo, P., & Petroff, S. (2009). Musique romantique? Entretien avec Georges Starobinski. Critique, 745-746, 535-547. Lombardo, P., & Roger, P. (2009). Introduction. Critique, 745-746, 451-454.

Monnier, A. (2009). La salutation larmoyante, Jean de Léry et ses traductions du tupinamba. Asdiwal Revue genevoise d'anthropologie et d'Histoire des Religions, 4, 63-74.

Mulligan, K. (2009a). On being struck by value-exclamations, motivations and vocations. In B. Merkel (Ed.), Leben mit Gefühlen. Emotionen, Werte und ihre Kritik (pp. 141-161). Paderborn: mentis-Verlag.

Cameron (Eds.), The Routledge Companion to Metaphysics (pp. 401-411). London: Routledge.

N'Diaye, K., Sander, D., & Vuilleumier, P. (2009). Self-relevance processing in the human amygdala: Gaze direction, facial expression, and emotion intensity. Emotion, 9(6), 798-806.

Peelen, M. V., Glaser, B., Vuilleumier, P., & Eliez, S. (2009). Differential development of selectivity for faces and bodies in the fusiform gyrus. Development Science, 12(6), 16-25.

Peelen, M. V., Lucas, N., Mayer, E., & Proust sans frontières (pp. 59-84). Caen: Vuilleumier, P. (2009). Emotional attention in acquired prosopagnosia. Social Cognitive Affective Neuroscience, 4(3), 268-277.

> Sander, D., & Scherer, K. R. (Eds.). (2009a). Oxford Companion to emotion and the affective sciences. New York and Oxford: Oxford University Press.

Traité de psychologie des émotions. Paris: Dunod.

Scherer, K. R. (2009). The dynamic architecture of emotion: Evidence for the component process model. Cognition and Emotion, 23(7), 1307-1351.

Scherer, K. R., & Brosch, T. (2009). Culturespecific appraisal biases contribute to emotion dispositions. European Journal of Personality, 23, 265-288.

Schwartz, S., & Constantinescu, I. (2009). Le laboratoire du sommeil. Paris: Editions le Pommier.

Vrticka, P., Andersson, F., Sander, D., & Vuilleumier, P. (2009). Memory for friends or foes: The social context of past encounters with faces modulates their subsequent neural traces in the brain. *Social Neuroscience*, *4*(5), 384-401.

Vuilleumier, P., & Huang, Y. M. (2009). Emotional attention: Uncovering the mechanisms of affective biases in perception. Current Directions in Psychological Science, 18(3), 148-152.

News

Achievements

Prof. Norbert Semmer received on September 2009 the Siegfried Greif Innovation Award from the Division of Industrial and Organizational Psychology of the German Psychological Association. The German Psychological Association is the professional association of psychologists actively involved in teaching and research in Germany.

A SYNERGIA research grant, a new important funding initiative of the Swiss National Foundation, has just been awarded to the project «Intentionality as the Mark of the Mental. Metaphysical Perspectives on Contemporary Philosophy of Mind», led by Prof. Kevin Mulligan, Prof. Gianfraco Soldati, Dr. Julien Deonna and Dr. Fabrice Teroni as project leaders. The principal investigator is Prof. Fabrice Correira (UNIGE). The budget amounts to CHF 1 350 000 for a duration of three years and it will finance at least two doctoral students in the NCCR Affective Sciences. The SYNERGIA researchers will work on reconciling the results and methods of modern metaphysics with the main topics of research in the contemporary philosophy of mind. This project is closely linked to the large four-year European International Training Network project (Seventh Framework Programme) «Perspectival Thoughts and Facts» and will start in March 2010.

Jointly with D. Courvoisier, R. Voellinger, T. Agoritsas, P. Chopard, B. Burnand and T. Perneger from the Geneva and Lausanne University Hospitals, the NCCR members Dr. R.E. Schmidt and Prof. Patrizia Lombardo were awarded a research grant of CHF 30 000 to investigate the role of regret and regret coping strategies in medical decision making.

Sophie Jarlier is the 2009 winner of the poster session of the Lemanic Neuroscience Annual Meeting (LNAM) on November 27. Her poster presents the results of a study on the human facial thermal changes induced by spontaneous emotions.

Prof. Patrik Vuilleumier is the 2009 winner of the Hans-Sigrist prize awarded by the University of Bern with a grant of CHF 100 000. The Hans-Sigrist Foundation Prize is the most important distinction of the University of Bern. The NCCR Affective Sciences is very proud of this prestigious scientific recognition.

Dr. David Sander became Professor of Psychology in the domain of emotion psychology and head of the Laboratory for the study of Emotion Elicitation and Expression (E3lab) at the Department of Psychology, (FPSE) of the University of Geneva.

Dr. Didier Grandjean became Professor of Psychology in the domain of affective neuropsychology and neurosciences, and head of the Neuroscience of Emotion and Affective Dynamics lab (NEAD) at the Department of Psychology, (FPSE) of the University of Geneva. ■

OTHER "MARK YOUR CALENDARS"

Nuit de la science "Extrêmes & limites", July 10-11 2010

« Nuit de la science », which will take place next July. As usual, an exhibition stand and workshops are planned. We are looking for people to be involved in this event. Note that it is a great opportunity to do surveys and inquiries with the general public. If you are interested, please contact carole.varone@unige.ch

Annual Research Forum (ARF)

The NCCR Affective Sciences will participate in the next The NCCR's Annual Research Forum will take place on March 22-23, 2010 in the presence of the International Scientific Council. All researchers are expected to come and present their latest results.

Progress Report 2010-Deadline, April 15 2010

International Summer School in Affective Sciences (ISSAS) 2010, August 23 to September 1st 2010, Château de Bossey



NEWS

Events

Stigmata at the International Museum of the Red Cross and Red Crescent, Geneva. Organized and produced by the Musée de l'Elysée, Stigmata presented the works of seven contemporary photographers from different parts of the world working on people and places dealing with situations of crisis. The NCCR Affective Sciences participated in this exhibition organizing conferences and debates from March to July 2009.

Montreux Jazz festival, July 2009. Four workshops on music and emotion were organized in Montreux during the Jazz Festival. Furthermore, in order to understand how the different types of music influence our emotions, Prof. Didier Grandjean conducted a survey on the capacity of music to express emotion. Several NCCR researchers are already working on new workshops for the Montreux Jazz Festival in 2010.

"The Expression of the Emotions in Man and Animal" exhibition held from October 13, 2009 to February 7, 2010 at the Muséum d'histoire naturelle in Geneva was inaugurated on October 12, 2009. Dr. Marc Mehu, Dr. Benoît Bediou and Ms. Nele Dael, research members of the GEneva Multimodal Emotion Portrayals group (GEMEP), co-organized the realization of this exhibition and eight workshops with the Natural Science Museum in Geneva.

CJB. On September 5-6, 2009, our NCCR organized, for the second time, workshops in the garden of the Conservatoire et Jardin botaniques in Geneva in the framework of the exhibition « Emotions de collection, collections d'émotions ». The visiting public could take part interactively in several experiments which provided lots of fun.

La "Journée des collégiens" is an event organized by the University of Geneva which took place during 8 days in *November 2009*. During this event, NCCR researchers worked with about 100 secondary school students each day. About ten NCCR researchers organized and conducted specific workshops.

Figvra-Représentations du divin. On *December 10-12*, the History of Religion project organized a Colloquium "Les dieux en (ou sans) émotion, approche comparatiste" with the Groupe de Recherche Européen-CNRS (Figvra-Représentations du divin). Well-known researchers took part in this event, like Prof Ando Clifford, Professor in the

Department of Classics and associate prof. in the Department of History at the University of Chicago.

Epistemic emotions. On *July 14*, the Philosophy project organized a workshop with the Episteme group in Geneva on Epistemic emotions.

Emotions and perception. On July 29, the Philosophy project organized a work-shop on "Emotions and Perception"

ISSAS 2009

The International Summer School in Affective Sciences (ISSAS) 2009 was the first in what we hope will soon become an established and prestigious institution. Its aim is to educate the next generation of affective scientists. Given that current doctoral students and postdoctoral fellows working in affect-related areas will be part of the group of scientists who will help to firmly establish and ensure the continued existence of Affective Sciences as an interdisciplinary field, we have founded this summer school so as to devote a major effort to their training.

Such an enterprise is made necessary by the interdisciplinary nature of the Affective Sciences. Graduate students and postdoctoral fellows who are already competent in the discipline they graduated in can hardly rely on traditional disciplinary training to expand their knowledge and acquire a broad vision of this relatively new field. This summer school is therefore aiming at a hitherto unprecedented interdisciplinary focus. It will provide up-todate overviews of the methods and theories used by all the disciplines involved in understanding emotion and affect. The event will afford participants a unique opportunity to profit from a curriculum based on common epistemological, conceptual, and methodological bases, and, most im-



portantly, to pursue affect as a common object of study with colleagues from many different fields. Young researchers coming from all over the world will find an opportunity here to form strong professional ties with each other as well as with the invited faculty members. They can use these contacts with recognized scientists and with their future colleagues to build a substantial scientific network for themselves even at an early stage in their careers. The ISSAS is a yearly event, with an enduring structure and a strong dedication to scientific excellence, but with a different theme every year. In 2010, the school will concern itself with the theme "Emotion Regulation and Management"

RESEARCH FOCUS

Musical Activities at the NCCR Affective Sciences 2009-2010



As part of our focus on "Aesthetic Emotions", the emotionally expressive powers of music have come under close scrutiny here at the NCCR Affective Sciences with the organisation during the last year of a number of workshops, a large interdisciplinary conference as well various ongoing experimental studies.

he way that abstract music can express and arouse emotions is one of the most mysterious and fascinating aspects of emotion research. Patterns of sound have no immediate bearing upon our well-being, yet

are responsible for some of the most profound experiences that people report. Research into our responses to music can potentially illuminate the expressive powers of music, as well as delve into some of the more unusual emotions aroused by music such as wonder or transcendance, as well as normally unpleasant emotions like sadness or tension which in musical contexts become enjoyable to experience. To tackle these issues, various members of the NCCR Affective Sciences have been engaged in psychological, neuroscientific and philosophical studies, and have organized a number of activities in collaboration with the Geneva Haute Ecole de Musique, the Geneva musicology department and the Grand Théâtre. Between March and June 2009, six workshops were held focusing on various aspects of instrumental and vocal performance. Issues addressed included the ways that musicians feel personally engaged with the music they are playing and

how the physical nature of their instruments constrains or enhances their expressive capacities. For instance we learned that it was often more difficult to create an even tone on the Baroque counterparts of the violin or oboe, but expert musicians reported that they valued the greater flexibility and expressive potential that accompanied these difficulties. Meanwhile with regards to the voice, the internationally famous tenor Thomas Moser emphasised the ways that a professional performer must avoid becoming caught up in the emotions of the music, a sentiment echoed by soprano Gabriela Fontana at our workshop on Benjamin Britten's opera Peter Grimes.

In July, a number of researchers from the NCCR also contributed presentations to the Montreux Jazz Festival, looking at various ways in which improvisation can relate to the expression and arousal of emotions. Didier Grandjean also conducted survey research at the festival looking at the kinds of emotional responses that jazz listeners have, supplementing earlier research into listener responses to classical music (see Zentner, Grandjean and Scherer, 2008).

The highlight of the year was certainly our 3-day conference 'The Emotional Power of Music' (June 27th-29th 2009) which brought together experts from psychology, philosophy, neuroscience, musicology and performance from around the world to present their research on the nature of musical expression and arousal, and notably the ways in which the powers Affect & Emotion

of music have been subject to social controls throughout history or used in medical practice. A number of debates were addressed, including whether music can arouse regular emotions or only special aesthetic emotions, and the nature of the neural and psychological mechanisms responsible for musical affect. These and other debates will be advanced with a resulting volume of articles edited by Tom Cochrane, Bernardino Fantini and Klaus Scherer.

Meanwhile there is still much data to be gathered to pin down our responses to music. Psychological experiments are currently in progress in which listeners employ continuous ratings of their changes in arousal and judgements of expressive content while listening to music. Continuous ratings are a particularly important innovation for research here because all too often listeners are forced to apply simple emotional labels to a piece of music when in fact there are all kinds of nuanced variations in a work as it progresses. Additionally an fMRI experiment is about to begin aimed at observing and measuring similarities in neural activation between people as they listen to a string quartet by Schubert. Here again we are looking for more valid ways to explore musical experience by presenting listeners with an entire work instead of short clips, and again we will be looking for subtle variations in emotional arousal as the music progresses.

Finally, the Swiss Center for Affective Sciences has become a major partner in a 2 million Euro interdisciplinary project on synchronization in music and emotion, called "Social Interaction and Entrainment using Music PeRformance Experimentation" (SIEMPRE). Prof. D. Grandjean coordinates the contribution of the center to this highly interdisciplinary project involving psychologists, philosophers, engineers, and cognitive neuroscientists. Musical performance is known to be one of the most intensely collaborative activities that humans engage in so there is much we can potentially learn about social interaction from this paradigmatic case. This research is also particularly geared towards developing technological ways to measure and enhance social collaboration and its accompanying experiences of intense emotional engagement, which may well have applications beyond the field of musical appreciation.

Dr. Thomas Cochrane, postdoctoral fellow

Reference: Zentner, M., Grandjean, D., & Scherer, K. R. (2008). Emotions evoked by the sound of music: Characterization, classification, and measurement. *Emotion*, 8(4), 494–521.



Phase II Research projects at a glance

APPRAISAL / VALUES / NORMS

The neuro-cognitive architecture of emotion elicitation and differenciation

LEADERS: David Sander / Klaus Scherer

This project aims to achieve progress in theory building and the conceptualization of the fundamental neurobiological and psychological processes underlying the architecture and dynamics of emotional elicitation and differentiation, and to conduct experimental research on appraisal processes, in particular the role of relevance, valence, coping potential, and norms/values. STAFF:

Postdocs Chiara Cristinzio* Vera Sacharin Pascal Vrticka*

PhD Students Elizabeth Clark-Polner Alison Montagrin Christian Mumenthaler

Emotion, Feeling and Value

LEADER: Kevin Mulligan

This project aims to elucidate the concept of valence in emotion, particularly in relation to intentionality, motivation and regulation, values, and self-reflexive processes. STAFF:

Senior Researchers Julien-Amos Deonna* Fabrice Teroni

PhD Students

Federico Lauria Olivier Massin Alain Pe-Curto

The Impact of Emotional Cues on Prosocial **Behavior and Norm Compliance**

LEADER: Ernst Fehr

This project studies the impact of subliminal emotional cues on prosocial behaviour and norm compliance in economic games; in addition, the goal is to identify the neural network causally involved in the behavioral effects of the primes with the help of neuroimaging and brain stimulation tools. STAFF:

Senior Researcher Klaas Enno Stephan Postdocs Thomas Baumgartner* Charles Efferson Christoph Eisenegger Susanne Leiberg Giorgia Silani

PhD Students Olga Klimecki Frédéric Schneider

Myths and Rites as Cultural Expression of Emotion

LEADER: Philippe Borgeaud

This project aims to continue the comparative investigation of myths and rites as cultural expressions of emotions in different ancient civilizations, especially related to the notion of the "sacred". STAFF:

Senior Researchers

Francesca Prescendi Youri Volokhine

Postdoc Doralice Fabiano PhD Student Anne-Caroline Rendu Loisel*

Systems / Dynamics

Emotional response patterning and its mental representation

LEADERS: Didier Grandjean / Klaus Scherer

This project aims to experimentally examine emotional response patterning as driven by appraisal, the consequent adaptive mechanisms and their mental representation, categorization and verbal labelling, as well as the regulation mechanisms associated to such responses. STAFF:

Postdocs

narrative structure.

STAFF:

Sascha Fruehholz Eva Krumhuber Marc Mehu Marcello Mortillaro Sona Patel Julie Péron Jacobien van Peer

PhD Students Leonardo Ceravolo Andy Christen Nele Dael* Kornelia Gentsch Jérôme Glauser* Sebastian Korb* Valérie Milesi* Katja Schlegel

Affective Dynamics & Aesthetic Emotions

LEADERS: Patrizia Lombardo / Gianfranco Soldati

This project aims to explore the role of affective dy-

namics in aesthetic emotions with the help of philo-

sophical and literary science approaches, focusing

on the temporal dimension of emotions and their

Senior Researcher Sophie Schwartz Postdocs Tatjana Aue Yann Cojan Corrado Corradi dell'Acqua* Swann Pichon **Gwladys** Rey Virginie Sterpenich

STAFF:

PhD Student Julien Zanetta*

INDIVIDUAL DIFFERENCES / DISPOSITION

Work & emotions: Experiencing and regulating emotions, issues of self-involvement, and relationships to well-being and performance

LEADERS: Norbert Semmer / Franziska Tschan

This project aims to empirically study the experience and regulation of emotion in work settings, in particular in relation to issues of self-involvement and self-esteem, as well as their effects on well-being and performance.

STAFF:

Senior Researchers Nicola Jacobshagen*

Postdocs Martial Berset Laurenz Meier Laurence Messerli PhD Students Sven Gross* Céline Mühlethaler Pascale Widmer*

Wolfgang Kälin

Emotion and Gender under a Power Perspective

LEADERS: Marianne Schmid-Mast / Susanne Kaiser

This project aims to empirically examine the effect of gender differences on emotion as approached from a power perspective, in particular the effect of hierarchical position and emotional sensitivity on the experience and labelling of emotion by men and women. STAFF:

Postdoc Petra Schmid*

LEADER: Martial Van der Linden

The aims of this project include the deve opment of measures of self-regulation and impulsivity, the exploration of underlying cognitive-affective processes and neural su strates, and the investigation of their role psycho- and neuropathological disorders. light of basic-research findings, prevention and intervention programs will be developped

Affect & Emotion

Cerebral bases of individual differences in affect perception and regulation

LEADERS: Patrik Vuilleumier / Theodor Landis

People differ in the way they react to emotional events. This project aims to identify the neural processes underlying individual differences in emotion perception and emotion regulation, including their relation to attachment style, self/other representations, and empathy. The project also examines how emotional events may induce long-lasting effects on brain states, and thus modify subsequent behaviour or cognitive performance.

PhD Students

Amal Achaibou Hamdi Ervilmaz Christoph Hofstetter Leonie Koban **Camille Piguet** Johanna Wiebke Trost

The cognitive-affective interplay of self regulation

STAFF:

rel- ind ing ub- in In	Senior Researcher Ralph Erich Schmidt* PhD Students Joël Billieux Fabienne Esposito Jean-Marc Gomez* Claudia Lardi
ion	Sandrine Oliveira
ed.	Lucien Rochat

Research Foci Postdocs

Aesthetic emotions Thomas Cochrane* Decision making & conflict **Benoit Bediou Empathy & fairness**

Gender

Language & Culture Anna Ogarkova* Cristina Soriano*

EmOdor Project LEADERS: David Sander / Patrik Vuilleumier

This project is expected to further the scientific knowledge concerning the emotional and motivational foundations and consequences of olfactory processing using methods and concepts of the affective sciences. **Senior Researcher** Sylvain Delplanque Postdoc Camille Ferdenzi **PhD Students** Géraldine Coppin Sophie Jarlier Aline Pichon

Brain & Behavior Laboratory

The Brain and Behaviour Laboratory (BBL) is a multidisciplinary center to study the cerebral bases of human mental functions, emotions, and behaviour as well as dysfunctions due to neurological or psychiatric diseases.