

Mehdi Khamassi

Tenured Research Scientist (CR1 CNRS)
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Research interests

Computational, behavioral & brain mechanisms for the online adaptive coordination of parallel learning processes in animals and robots.

Approaches

Combining computational modelling, experimentation in cognitive robotics, model-based analyses of neurobiological data, design of new experimental protocols to test model predictions, and (formerly) extracellular multi-unit recordings in behaving animals.

Affiliations

Since 2017 **Visiting researcher**, Department of Experimental Psychology, University of Oxford, UK
Since 2016 **Visiting researcher**, National Polytechnical University of Athens, Greece
Since 2014 **Tenured research scientist (CR1 CNRS)**, ISIR, UPMC, Paris, France
2013-2015 **Visiting researcher**, Center for Mind/Brain Sciences, University of Trento, Italy
2010-2014 **Tenured research scientist (CR2 CNRS)**, ISIR, UPMC, Paris, France.
2008-2010 **Post-doctoral fellow**, INSERM - Stem-cells and Brain Research Institute, Lyon, France
2008 (3m.) **Visiting researcher**, Neural Computation Unit, Okinawa Inst. of Science & Tech, Japan

Other current academic responsibilities

Since 2015 **Director of studies and pedagogical council member for the CogMaster**, École Normale Supérieure / École des Hautes Études en Sciences Sociales / Univ. Paris 5.
Since 2012 **Co-animator of the “GT8 Robotics & Neuroscience” working group**, CNRS National Robotics Network called “Groupement De Recherche” (GDR).
Since 2012 **Member of the executive committee of the SMART Labex**, gathering eight institutes/laboratories related to UPMC: ISIR, LIP6, LIF, LJLL, LTCI, LUTIN, L2E & STMS.

Education

2014 **HDR (Habilitation to Direct Researches)**, UPMC, Paris, France
2003-2007 **Ph.D. in Cognitive Neuroscience** (summa cum laude), UPMC, Paris, France
2002-2003 **M.Sc. in Cognitive Sciences – CogMaster** (summa cum laude, top rank), UPMC / École Normale Supérieure Ulm / École Polytechnique / EHESS, Paris, France
2000-2003 **M.Eng. in Computer Science**, École Nationale Supérieure d’Informatique pour l’Industrie et l’Entreprise, Conservatoire National des Arts et Métiers / Université d’Évry, France. *Specialties: Artificial Intelligence & Statistical Modelling.*
1998-2000 **Maths Sup. / Maths Spé. (MP)**, Lycée Charlemagne, Paris, France. *2 years of intensive Maths/Physics preparing the competitive entrance to French “Grandes Écoles”.*
July 2005 **Okinawa Computational Neuroscience Course**, Okinawa, Japan
Nov. 2004 **Okinawa Computational Neuroscience Course**, Okinawa, Japan
Aug. 2003 **Integrative and Computational Neuroscience Summer School**, Concarneau, France

Awards, honors and fellowships

2017 **Visiting Fellowship**, University of Oxford, Department of Experimental Psychology
2016 **Visiting Fellowship**, National Polytechnical University of Athens, ICCS Robotics Lab
2014 **Visiting Fellowship**, University of Trento, Center for Mind/Brain Sciences
2012 **Best paper award at the International Conference on Simulation of Adaptive**

- Behavior**, with Jean Bellot & Olivier Sigaud.
- 2011 **Best 2010 Paper in Neuroscience, "La Recherche" Price**, with Karim Benchenane, Sidney Wiener, Francesco Battaglia, Adrien Peyrache, Patrick Tierney & Yves Gioanni.
- 2010 **Top rank at national concourse for a tenured research position** at the Centre National de la Recherche Scientifique (CNRS). Interdisciplinary commission (CID) 44.
- 2010 **Top rank at concourse for a tenured assistant professor position** at Université Pierre et Marie Curie.
- 2007 **National Qualification for university-level teaching** both in Computer Science and in Neuroscience by the Conseil National des Universités (CNU).
- 2005 **Initial Research Project Award** from Okinawa Institute of Science and Technology (OIST) to attend the Okinawa Computational Neuroscience Course (OCNC), Japan.
- 2004 **Initial Research Project Award** from Okinawa Institute of Science and Technology (OIST) to attend the Okinawa Computational Neuroscience Course (OCNC), Japan.
- 2003 **French Research Ministry Award** to attend the Integrative and Computational Neuroscience Summer School in Concarneau, France.
- 2003 **French Research Ministry PhD fellowship (MENRT)**, Université Pierre et Marie Curie, "Brain, Cognition & Behavior" Doctoral School, 1st rank.

Funding (since tenure)

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- 2017-2019 **CNRS "Osez l'Interdisciplinarité"** – "ROBAUTISTE: Learning and joint attention in autism" (role: PI with Mohamed Chetouani, Ouriel Grynszpan, Matthew Rushworth, Jérôme Sallet, Olivier Sigaud) – Total: 150 K€ (for the team)
- 2016-2019 **ANR-NSF Collaborative Research in Computational Neuroscience** – "Neurobehavioral assessment of a computational model of reward learning" (role: co-PI with Matt R. Roesch (PI), Alain Marchand) – Total: 670 K\$ (123 K\$ for the team)
- 2016-2018 **Royal Society International Exchanges Scheme** – "Highly stochastic analytic meta-learning: the Braitenberg vehicles case study" (role: co-PI with Iñaki Rañó (PI), KongFatt Wong-Lin) – Total: 10 K€ (half for the team).
- 2015-2018 **European Union H2020-ICT-2014** – "DREAM: Deferred Restructuring of Experience in Autonomous Machines" (role: participant with Stéphane Doncieux (PI) et al.) – Total: 2784 K€ (758 K€ for the team)
- 2015-2016 **Sorbonne-Universités ANR-11-IDEX-0004-02 IDEX SUPER SU-15-R-PERSU-14 PERSU** – "ROBOT PARALLEARNING, Neuro-inspired coordination of parallel learning processes in robots" (role: PI) – Total direct costs: 70 K€ (for the team)
- 2013-2017 **Agence Nationale de la Recherche ANR-11-LABX-65 Labex SMART** – "Online Budgeted Learning" (role: co-PI with Ludovic Denoyer (PI), Patrick Gallinari, Benoît Girard) – Total direct costs: 285 K€ (half for the team)
- 2013-2016 **Agence Nationale de la Recherche ANR-12-CORD-0030 (CONTINT)** – "ROBOERGOSUM, Robot Self-Awareness" (role: co-PI with Rachid Alami, Benoît Girard, Raja Chatila (PI)) – Total direct costs: 422 K€ (258 K€ for the team)
- 2012-2013 **CNRS PEPS Program** – "GoHaL, Computational and neurophysiological bases of goal-directed and habit learning" (role: co-PI with Andrea Brovelli (PI), Francesca Sargolini) – Total direct costs: 44 K€ (10 K€ for the team)
- 2011-2015 **Agence Nationale de la Recherche ANR-11-BSV4-006** – "Learning Under Uncertainty" (role: co-PI with Paul Apicella, Etienne Coutureau, Benoît Girard, Alain Marchand, Emmanuel Procyk (PI)) – Total direct costs: 616 K€ (73 K€ for the team)
- 2011-2014 **Ville de Paris Emergence(s) Program** – "HABOT, From flexible to habitual behaviors: neuroinspired learning for humanoid robots" (role: co-PI with Raja Chatila, Benoît Girard (PI)) – Total direct costs: 285 K€ (for the team)
- 2011-2012 **CNRS PEP11 Program** – "IMAVO, Interactions between learning modules in a volatile environment" (role: co-PI with Etienne Coutureau, Alain Dutech, Benoît Girard, Alain

Marchand (PI), Nicolas Rougier) – Total direct costs: 27 K€ (6 K€ for the team)

Publications in international peer-reviewed journals

23. Viejo, G., Girard, B., Procyk, E. and Khamassi, M. (2017). Adaptive coordination of working-memory and reinforcement learning in non-human primates performing a trial-and-error problem solving task. **Behavioral Brain Research**.
22. Viejo, G., Girard, B. and Khamassi, M. (2016). [Re] Speed/accuracy trade-off between the habitual and the goal-directed process. **ReScience**, 2(1).
21. Viejo, G., Khamassi, M., Brovelli, A. and Girard, B. (2015). Modelling choice and reaction time during instrumental learning through the coordination of adaptive working memory and reinforcement learning. **Frontiers in Behavioral Neuroscience**, 9:225.
20. Palminteri, S., Khamassi, M., Joffily, M. and Coricelli, G. (2015). Contextual modulation of value signals in reward and punishment learning. **Nature Communications**, 6:8096.
19. Lesaint, F., Sigaud, O., Clark, J.J., Flagel, S.B. and Khamassi, M. (2015). Experimental predictions drawn from a computational model of sign-trackers and goal-trackers. **Journal of Physiology – Paris**, 109(1-3):78-86.
18. Khamassi, M., Quilodran, R., Enel, P., Dominey, P.F. and Procyk, E. (2015). Behavioral regulation and the modulation of information coding in the lateral prefrontal and cingulate cortex. **Cerebral Cortex**, 25(9):3197-218.
17. Lesaint, F., Sigaud, O. and Khamassi, M. (2014). Accounting for negative automaintenance in pigeons: A dual learning systems approach and factored representations. **PLoS ONE**, 9(10):e111050.
16. Lesaint, F., Sigaud, O., Flagel, S.B., Robinson, T.E. and Khamassi, M. (2014). Modelling individual differences observed in Pavlovian autoshaping in rats using a dual learning systems approach and factored representations. **PLoS Computational Biology**, 10(2):e1003466.
15. Arleo, A., Déjean, C., Allegraud, P., Khamassi, M., Zugaro, M.B. and Wiener, S.I. (2013). Optic flow stimuli update anterodorsal head direction neuronal activity in rats. **Journal of Neuroscience**, 33(42):16790-5.
14. Cos, I., Khamassi, M.*, Girard, B. (2013). Modelling the learning of biomechanics and visual planning for decision-making of motor actions. **Journal of Physiology – Paris**, 107(5):399-408. (* corresponding author)
13. Khamassi, M., Enel, P., Dominey, P.F. and Procyk, E. (2013). Medial prefrontal cortex and the adaptive regulation of reinforcement learning parameters. **Progress in Brain Research**, 202:441-464.
12. Humphries, M.D., Khamassi, M. and Gurney, K. (2012). Dopaminergic control of the exploration-exploitation trade-off via the basal ganglia. **Frontiers in Neuroscience**, 6:9.
11. Caluwaerts, K., Staffa, M., N'Guyen, S., Grand, C., Dollé, L., Favre-Félix, A., Girard, B. and Khamassi, M. (2012). A biologically inspired meta-control navigation system for the Psikharpa rat robot. **Bioinspiration & Biomimetics**, 7(2):025009.
10. Khamassi, M. and Humphries, M.D. (2012), Integrating cortico-limbic-basal ganglia architectures for learning model-based and model-free navigation strategies. **Frontiers in Behavioral Neuroscience**, 6-79.
9. Khamassi, M., Lallée, S., Enel, P., Procyk, E. and Dominey P.F. (2011). Robot cognitive control with a neurophysiologically inspired reinforcement learning model. **Frontiers in Neurorobotics**, 5:1.
8. Benchenane, K., Peyrache, A., Khamassi, M., Wiener, S.I. and Battaglia, F.P. (2010). Coherent theta oscillations and reorganization of spike timing in the hippocampal-prefrontal network upon learning. **Neuron**, 66(6):921-936.
7. Peyrache, A., Benchenane, K., Khamassi, M., Wiener, S.I. and Battaglia, F.P. (2010). Sequential reinstatement of neocortical activity during slow oscillations depends on cells' intrinsic excitability. **Frontiers in Systems Neuroscience**, 3:18.

6. Peyrache, A., Benchenane, K., Khamassi, M., Wiener, S.I. and Battaglia, F.P. (2010). Principal component analysis of ensemble recordings reveals cell assemblies at high temporal resolution. **Journal of Computational Neuroscience**, 29(1-2):309-325.
5. Peyrache, A., Khamassi, M., Benchenane, K., Wiener, S.I. and Battaglia, F.P. (2009). Replay of rule-learning related neural patterns in the prefrontal cortex during sleep. **Nature Neuroscience**, 12(7):919-926.
4. Khamassi, M.*, Mulder, A.B. *, Tabuchi, E., Douchamps, V. and Wiener S.I. (2008). Anticipatory reward signals in ventral striatal neurons of behaving rats. **European Journal of Neuroscience**, 28(9):1849-1866. (* equally contributing authors)
3. Khamassi, M., Lachèze, L., Girard, B., Berthoz, A. and Guillot, A. (2005). Actor-critic models of reinforcement learning in the basal ganglia: From natural to artificial rats. **Adaptive Behavior**, 13(2):131-148.
2. Meyer, J.-A., Guillot, A., Girard, B., Khamassi, M., Pirim, P., and Berthoz, A. (2005). The Psikharpax project: Towards building an artificial rat. **Robotics and Autonomous Systems**, 50(4):211-223.
1. Zugaro, M. B.*, Arleo, A.*, Déjean, C., Burguière, E., Khamassi, M. and Wiener, S. I. (2004). Rat anterodorsal thalamic head direction neurons depend upon dynamic visual signals to select anchoring landmark cues. **European Journal of Neuroscience**, 20(2):530-536. (* equally contributing authors)

Journal papers in preparation, submitted or in revision

11. Griessinger, T., Coricelli, G.* and Khamassi, M.* (in preparation). A behavioral investigation of inter-individual differences in learning during repeated strategic interactions. (* equally contributing authors)
10. Cinotti, F., Fresno, V., Aklil, N., Coutureau, E., Girard, B., Marchand, A.* and Khamassi, M.* (in preparation). Striatal dopamine controls exploration in a non-stationary probabilistic multi-armed bandit task. (* equally contributing authors)
9. Wydoodt, P., Sescousse, G., Domenech, P., Barbalat, G., Khamassi, M. and Dreher, J.-C. (in preparation). Gambler's fallacy and hot hand fallacy in pathological gamblers.
8. Khamassi, M., Peyrache, A., Benchenane, K., Hopkins, A., Lebas, N., Douchamps, V., Droulez, J., Battaglia, F.P. and Wiener, S.I. (in preparation). Differential modulation by hippocampal theta and sharp-wave ripples of task rule cells and behavioral strategy cells in the rat medial prefrontal cortex.
7. Aklil, N., Girard, B., Denoyer, L. and Khamassi, M. (submitted). Sequential action selection and active sensing for budgeted localization in robot navigation.
6. Lee, B. et al. (submitted). Manipulating the revision of reward value during the intertrial interval increases sign tracking and dopamine releases.
5. Rougier, N.*, Hinsen, K.* et al. (submitted). Sustainable computational science : the ReScience initiative.
4. Khamassi, M., Velentzas, G., Tsitsimis, T. and Tzafestas, C. (submitted). Robot fast adaptation to changes in human engagement during simulated dynamic social interaction with active exploration in parameterized reinforcement learning.
3. Renaudo, E., Girard, B., Devin, S., Alami, R., Clodic, A., Chatila, C. and Khamassi, M. (submitted). Coordination of model-based and model-free reinforcement learning in a robot neuro-inspired cognitive architecture.
2. Dollé, L., Chavarriaga, R., Guillot, A.* and Khamassi, M.* (submitted). Interactions between spatial strategies producing generalization gradient and blocking: a computational approach.
1. Bellot, J., Sigaud, O., Roesch, M.R., Schoenbaum, G., Girard, B. and Khamassi, M. (submitted). Dopamine neurons phasic activity does not encode the reward prediction error that behavioral adaptation would predict.

Book chapters

4. Alexandre, F., Dominey, P.F., Gaussier, P., Girard, B., Khamassi, M. and Rougier, N. (2017). When Artificial Intelligence and Computational Neuroscience meet. In editors (Eds.), Book title, **Heidelberg, Germany: Springer-Verlag.**
3. Pacherie, E. and Khamassi, M. (2017). Action. In Andler, D., Collins, T. and Tallon-Baudry, C. (Eds.), *Manuel de Sciences Cognitives*, **Paris, France: Gallimard.**
2. Khamassi, M., Wilson, C., Rothé, R., Quilodran, R., Dominey, P.F. and Procyk, E. (2011). Meta-learning, cognitive control, and physiological interactions between medial and lateral prefrontal cortex. In Mars, R., Sallet, J., Rushworth, M. and Yeung, N. (Eds.), *Neural Bases of Motivational and Cognitive Control*, **Cambridge, MA: MIT Press.**
1. Battaglia, F.P., Peyrache, A., Khamassi, M. and Wiener, S.I. (2008). Spatial decisions and neuronal activity in hippocampal projection zones in prefrontal cortex and striatum. In Mizumori S. (Ed.) *Hippocampal place fields: Relevance to learning and memory*, **Oxford, UK: Oxford University Press.**

Peer-reviewed international conferences

17. Gillespie, J., Rano, I., Siddique, N., Santos, J.A. and Khamassi, M. (2017). Reinforcement Learning for Bio-Inspired Target Seeking. Proceedings of the **TAROS 2017 Conference**. Guildford, Surrey, UK.
16. Rano, I., Khamassi, M. and Wong-Lin, K. (2017). A Drift Diffusion Model of Biological Source Seeking for Mobile Robots. Proceedings of **IEEE International Conference on Robotics and Automation (ICRA 2017)**. Singapore.
15. Velentzas, G., Tzafestas, C. and Khamassi, M., (2017). Bio-inspired meta-learning for active exploration during non-stationary multi-armed bandit tasks. Proceedings of **IEEE Intelligent Systems Conference 2017**. London, UK.
14. Khamassi, M., Velentzas, G., Tsitsimis, T. and Tzafestas, C. (2017). Active exploration and parameterized reinforcement learning applied to a simulated human-robot interaction task. Proceedings of **IEEE Robotic Computing 2017**, pp. 28-35, Taipei, Taiwan.
13. Aklil, N., Girard, B., Khamassi, M. and Denoyer, L. (2017). Sequential Action Selection for Budgeted Localization in Robots. Proceedings of **IEEE Robotic Computing 2017**. Taipei, Taiwan.
12. Pasala, S.K., Khamassi, M. and Pammi, V.S.C. (2016). Variation in Intuitive Geometric Construct of Spatial Perception during Navigation. Proceedings of the **International Conference of the Academy of Neuroscience for Architecture (ANFA 2016)**. Salk Institute, La Jolla, CA, USA.
11. Renaudo, E., Girard, B., Chatila, C. and Khamassi, M. (2015). Respective advantages and disadvantages of model-based and model-free reinforcement learning in a robotics neuro-inspired cognitive architecture. **6th International Conference on Biologically Inspired Cognitive Architectures**, Lyon, France / open-access Elsevier journal "Procedia Computer Science".
10. Renaudo, E., Girard, B., Chatila, C. and Khamassi, M. (2015). Which criteria for autonomously shifting between goal-directed and habitual behaviors in robots? **5th International Conference on Development and Learning and on Epigenetic Robotics**, Providence, RI, USA.
9. Renaudo, E., Girard, B., Chatila, C. and Khamassi, M. (2014). Design of a control architecture for habit learning in robots. **3rd Living Machines Conference, Lecture Notes in Artificial Intelligence**, Springer, Publisher.
8. Bellot, J., Sigaud, O. and Khamassi, M. (2012). Which Temporal Difference Learning algorithm best reproduces dopamine activity in a multi-choice task? **From Animals to Animats 12: SAB Conference, Lecture Note in Computer Science 7426**, Springer Verlag, Publisher, pp. 289-298. BEST PAPER AWARD.
7. Caluwaerts, K., Favre-Félix, A., Staffa, M., N'Guyen, S., Grand, C., Girard, B. and Khamassi, M. (2012). Neuro-inspired navigation strategies shifting for robots: Integration of a multiple landmark taxon strategy. **1st Living Machines Conference, Lecture Notes in Artificial Intelligence 7375**, Prescott, T.J. et al. (Eds.), Springer, Publisher, pp. 62-73.
6. Khamassi, M., Quilodran, R., Enel, P., Procyk, E. and Dominey P.F. (2010). A computational model of integration between reinforcement learning and task monitoring in the prefrontal cortex.

- From Animals to Animats 11: SAB Conference, Lecture Note in Computer Science 6226**, Springer Verlag, Publisher, pp. 424-434.
5. Dollé, L., Khamassi, M., Girard, B., Guillot, A. and Chavarriaga, R. (2008) Analyzing interactions between navigation strategies using a computational model of action selection. **Spatial Cognition Conference, Lecture Notes in Computer Science 5248**, Springer, Publisher, pp. 71-86.
 4. Battaglia, F.P., Benchenane, K., Khamassi, M., Peyrache, A. and Wiener, S.I. (2007) Neural ensembles and local field potentials in the hippocampo-prefrontal cortex system during spatial learning and strategy. **1st Int Conference on Cognitive Neurodynamics (ICCN)**, Springer, Publisher, pp. 1-4.
 3. Khamassi, M., Martinet, L.-E. and Guillot, A. (2006). Combining self-organizing maps with mixture of experts: Application to an actor-critic model of reinforcement learning in the basal ganglia. **From Animals to Animats 9, SAB Conference, Lecture Notes in Computer Science 4095**, Springer Verlag, Publisher, pp. 394-405.
 2. Filliat, D., Girard, B., Guillot, A., Khamassi, M., Lachèze, L. and Meyer, J.-A. (2004) State of the artificial rat Psikharpax. **From Animals to Animats 8, SAB Conference**, MIT Press, Publisher, pp. 3-12.
 1. Khamassi, M., Girard, B., Guillot, A. and Berthoz, A. (2004) Comparing three Critic models of reinforcement learning on the basal ganglia connected to a detailed actor in a S-R task. **8th Int Conference on Intelligent autonomous systems**, IOS Press, Publisher, pp. 430-437.

National peer-reviewed journals

4. Girard, B. and Khamassi, M. (2016). Coopération de systèmes d'apprentissage par renforcement multiples. **Techniques de l'Ingénieur**, to appear. (In French)
3. Khamassi, M. and Doncieux, S. (2016). Nouvelles Approches en Robotique Cognitive. **Intellectica**, vol. 2016/1, num. 65, pp. 7-25. (In French)
2. Khamassi, M., Girard, B., Clodic, A., Devin, S., Renaudo, E., Pacherie, E., Alami, R. and Chatila, R. (2016). Integration of action, joint action and learning in robot cognitive architectures. **Intellectica**, vol. 2016/1, num. 65, pp. 169-203. (In English)
1. de Loor, P., Mille, A. and Khamassi, M. (2015). Intelligence artificielle : l'apport des paradigmes incarnés. **Intellectica**, vol. 2015/2, num. 64, pp. 27-52. (In French)

Theses

3. Khamassi, M. (2014). Coordination of parallel learning processes in animals and robots. **HDR (Habilitation to Direct Researches) Thesis**, Université Pierre et Marie Curie – Paris 6, France.
2. Khamassi, M. (2007). Complementary roles of the rat prefrontal cortex and striatum in reward-based learning and shifting navigation strategies. **PhD Thesis**, UPMC – Paris 6, France.
1. Khamassi, M. (2003). Une architecture de contrôle de la sélection de l'action dans les ganglions de la base pour le rat artificiel Psikharpax. **Master Thesis**, UPMC – Paris 6, France.

Wide-audience scientific communication articles

3. Khamassi, M. and Decremps, F. (2016). De l'art de conjuguer esprit critique et démarche scientifique. **The Conversation**. Contributions from Marie Pinhas & Fabrice Rousselot. (In French)
2. Khamassi, M. and Chatila, R. (2015). La conscience d'une machine. **Pour la Science**. (In French)
1. Khamassi, M. (2011). Psikharpax, le robot-rat intelligent. **Futura-sciences.com**. (In both French & English)

Papers, abstracts and posters in journals, conferences or workshops with minimal review

61. Tsitsimis, T., Velentzas, G., Khamassi, M. and Tzafestas, C. (2017). Online adaptation to human engagement perturbations in simulated human-robot interaction using hybrid reinforcement

- learning. **MultiLearn workshop at the 25th European Signal Processing Conference (EUSIPCO 2017)**, Kos Island, Greece.
60. Lee, B., Gentry, R., Bissonette, G.B., Herman, R.J., Mallon, J.J., Bryden, D.W., Calu, D.J., Schoenbaum, G., Coutureau, E., Marchand, A., Khamassi, M. and Roesch, M.R. (2017). Lengthening the intertrial interval increases sign tracking and dopamine release to conditioned and unconditioned stimuli. **Society for Neurosci Abstracts**, Washington, USA.
 59. Marchand, A., Gentry, R., Khamassi, M., Calu, D., Roesch, M.R. and Coutureau, E. (2017). Dopaminergic control of individual differences in appetitive learning. Poster at the **47th Meeting of the European Brain & Behaviour Society**, Bilbao, Spain.
 58. Velentzas, G., Tzafestas, C. and Khamassi, M. (2017). Bridging Computational Neuroscience and Machine Learning on Non-Stationary Multi-Armed Bandits. Poster at the **3rd International Conference on Reinforcement Learning and Decision Making (RLDM)**, Ann Arbor, Michigan, USA.
 57. Cinotti, F., Fresno, V., Aklil, N., Coutureau, E., Girard, B., Marchand, A.* and Khamassi, M.* (2017). Dopamine enables dynamic regulation of exploration. Poster at the **3rd International Conference on Reinforcement Learning and Decision Making (RLDM)**, Ann Arbor, USA.
 56. Marchand, A., Gentry, R., Khamassi, M., Calu, D., Roesch, M.R. and Coutureau, E. (2017). Neurobehavioral determinants of individual differences in appetitive learning. Poster at **NeuroFrance 2017, Colloquium of the French Neuroscience Society**, Bordeaux, France.
 55. Renaudo, E., Girard, B., Chatila, R. and Khamassi, M. (2016). Bio-inspired habit learning in a robotic architecture. **NIPS Workshop on Neurorobotics at NIPS 2016 Conference**.
 54. Marchand, A., Coutureau, E., Khamassi, M. and Roesch, M.R. (2016). Neurobehavioral assessment of a computational model of reward learning. Poster at the **Collaborative Research in Computational Neuroscience Conference**, Paris, France.
 53. Cinotti, F., Fresno, V., Aklil, N., Coutureau, E., Girard, B., Marchand, A.* and Khamassi, M.* (2016). Dopamine blockade affects exploration and learning rate in a non-stationary 3-armed bandit task. Poster at the **Collaborative Research in Computational Neuroscience Conf.**, Paris, France.
 52. Bault, N., Larsen, T., Khamassi, M., Polonio, L., Vostroknutov, A. and Coricelli, G. (2016). Influence of others' choice behavior on observational learning. Poster at the **14th Annual Meeting of the Society for NeuroEconomics**, Berlin, Germany.
 51. Cinotti, F., Fresno, V., Aklil, N., Coutureau, E., Girard, B., Marchand, A.* and Khamassi, M.* (2016). Dopamine blockade affects exploration and learning rate in a non-stationary 3-armed bandit task. Poster at the **6th International Symposium on Biology of Decision-Making**, Paris, France.
 50. Larsen, T., Palminteri, S., Vidal, J.R., Khamassi, M., Joffily, M. and Coricelli, G. (2015). Context can induce seeking behaviour in punishment conditions. Poster at the **13th Annual Meeting of the Society for NeuroEconomics**, Miami, U.S.A.
 49. Renaudo, E., Devin, S., Girard, B., Chatila, R., Alami, R., Khamassi, M. and Clodic, A. (2015). Learning to interact with humans using goal-directed and habitual behaviors. **Workshop on Learning for Human-Robot Collaboration at RO-MAN 2015 Conference**.
 48. Wydoodt, P., Sescousse, G., Domenech, P., Barbalat, G., Khamassi, M. and Dreher, J.-C. (2015). Gambler's fallacy and hot hand fallacy in pathological gamblers. Poster at the **5th International Symposium on Biology of Decision-Making**, Paris, France.
 47. Marchand, A., Fresno, V., Aklil, N., Cinotti, F., Girard, B., Khamassi, M. and Coutureau, E. (2015). Striatal dopamine controls exploration in a probabilistic task. Poster at the **5th International Symposium on Biology of Decision-Making**, Paris, France.
 46. Griessinger, T., Khamassi, M. and Coricelli, G. (2015). A behavioral investigation of inter-individual differences in learning during repeated strategic interactions. Poster at the **5th International Symposium on Biology of Decision-Making**, Paris, France.
 45. Girard, B., Aklil, N., Cinotti, F., Fresno, V., Denoyer, L., Coutureau, E., Khamassi, M. and Marchand, A. (2015). Modelling rat learning behavior under uncertainty in a non-stationary multi-armed

- bandit task. Poster at the **Colloque de la Société des Neurosciences Françaises**, Montpellier, France.
44. Viejo, G., Khamassi, M., Brovelli, A. and Girard, B. (2015). Modelling choice and reaction time during instrumental learning through the coordination of adaptive working-memory and reinforcement learning. Poster at the **Colloque de la Société des Neurosciences Françaises**, Montpellier, France.
 43. Liénard, J., Bellot, J., Cos, I., Khamassi, M. and Girard, B. (2015). Transmission delays in the basal ganglia proper are sufficient to explain beta-band oscillations in Parkinson's disease: mean-field and reduced models. **iCODE-SynchNeuro Workshop on neural population dynamics**, France.
 42. Lesaint, F., Sigaud, O. and Khamassi, M. (2014). A model of negative automaintenance in pigeons: Dual learning and factored representations. **Society for Neurosci Abstracts**, Washington, USA.
 41. Bellot, J., Liénard, J., Khamassi, M. and Girard, B. (2014). A biological plausible D1/D2 basal ganglia model. **Society for Neurosci Abstracts**, Washington, USA.
 40. Lesaint, F., Sigaud, O. and Khamassi, M. (2014). Accounting for negative automaintenance in pigeons: A dual learning systems approach and factored representations. Poster at the **4th International Symposium on Biology of Decision-Making**, Paris, France.
 39. Aklil, N., Marchand, A., Fresno, V., Coutureau, E., Denoyer, L., Girard, B. and Khamassi, M. (2014). Modelling rat learning behavior under uncertainty in a non-stationary multi-armed bandit task. Poster at the **4th International Symposium on Biology of Decision-Making**, Paris, France.
 38. Viejo, V., Khamassi, M., Brovelli, A. and Girard, B. (2014). Modelling choice and reaction time during instrumental learning through the coordination of adaptive working-memory and reinforcement learning. Poster at the **4th International Symposium on Biology of Decision-Making**, Paris, France.
 37. Viejo, V., Khamassi, M., Brovelli, A. and Girard, B. (2014). Coordination of adaptive working-memory and reinforcement learning systems explaining choice and reaction time during a human experiment. Poster at the **23rd Computational Neuroscience Society meeting (CNS 2014)**.
 36. Marchand, A., Fresno, V., Khamassi, M. and Coutureau, E. (2014). Dopaminergic modulation of the exploration level in a non-stationary probabilistic task. **FENS Abstract**, Milan, Italy.
 35. Palminteri, S., Khamassi, M., Joffily, M. and Coricelli, G. (2013). Reinforcement learning and counterfactual outcomes: evidence for context-value dependent adjustment of action values. Poster at the **Society for Neuroeconomics Annual Meeting**, Lausanne, Switzerland.
 34. Lesaint, F., Sigaud, O., Flagel, S.B., Robinson, T.E. and Khamassi, M. (2013). Modelling individual differences in rats using a dual learning systems approach and factored representations. Poster at the **5th International Symposium on Motivational and Cognitive Control**, ICM, Paris, France.
 33. Humphries, M.D., Khamassi, M. and Gurney, K. (2013). Dopaminergic control of the exploration-exploitation trade-off via the basal ganglia. Poster at the **3rd International Symposium on Biology of Decision-Making**, Paris, France.
 32. Lesaint, F., Sigaud, O. and Khamassi, M. (2013). Modelling individual differences in rats using a dual learning systems approach and factored representations. Poster at the **3rd International Symposium on Biology of Decision-Making**, Paris, France.
 31. Bellot, J., Sigaud, O., Girard, B. and Khamassi, M. (2013). Which Temporal Difference Learning algorithm best reproduces dopamine activity in a multi-choice task? Poster at the **3rd International Symposium on Biology of Decision-Making**, Paris, France.
 30. Lesaint, F., Sigaud, O., Flagel, S.B., Robinson, T.E. and Khamassi, M. (2013). Modelling individual differences observed in Pavlovian autoshaping in rats using a dual learning systems approach and factored representations. Poster at the **1st International Conference on Reinforcement Learning and Decision Making (RLDM)**, Princeton Univ., USA.
 29. Bellot, J., Khamassi, M., Sigaud, O. and Girard, B. (2013). Which Temporal Difference Learning algorithm best reproduces dopamine activity in a multi-choice task? Poster at the **22nd Computational Neuroscience Society meeting (CNS 2013)**, Paris, France.

28. Khamassi, M., Bellot, J., Sigaud, O. and Girard, B. (2013). Which Temporal Difference Learning algorithm best reproduces dopamine activity in a multi-choice task? Poster at the **Colloquium of the French Neuroscience Society**, Lyon, France.
27. Bellot, J., Sigaud, O. and Khamassi, M. (2012). Which Temporal Difference Learning algorithm best reproduces dopamine activity in a multi-choice task? Poster at the **4th Robotics and Neuroscience Days**, Paris, France.
26. Caluwaerts, K., Staffa, M., N'Guyen, S., Grand, C., Dollé, L., Favre-Félix, A., Girard, B. and Khamassi, M. (2012). A biologically inspired meta-control navigation system for the Psikharpax rat robot. Poster at the **2nd International Symposium on Biology of Decision-Making**, Paris, France.
25. Bellot, J., Sigaud, O. and Khamassi, M. (2012). Which Temporal Difference Learning algorithm best reproduces dopamine activity in a multi-choice task? Poster at the **2nd International Symposium on Biology of Decision-Making**, Paris, France.
24. Khamassi, M., Lallée, S., Enel, P., Procyk, E. and Dominey P.F. (2012). Robot cognitive control with a neurophysiologically inspired reinforcement learning model. Poster at the **2nd International Symposium on Biology of Decision-Making**, Paris, France.
23. Bellot, J., Sigaud, O., Roesch, M.R., Schoenbaum, G., Girard, B. and Khamassi, M. (2012). Dopamine neurons activity in a multi-choice task: reward prediction error or value function? Full paper at the **French Computational Neuroscience NeuroComp / KEOpS 12 workshop**, pp. 1-7, Bordeaux, France.
22. Humphries, M.D., Khamassi, M. and Gurney, K. (2012). Dopaminergic control of the exploration-exploitation trade-off via the basal ganglia. Poster at **FENS Forum**, Barcelona, Spain.
21. Khamassi, M., Lallée, S., Enel, P., Procyk, E. and Dominey, P.F. (2011). Human-Robot Interaction with the iCub Humanoid Robot using a Neuro-Inspired Model of Reinforcement Learning. Full paper + poster at **International workshop on bio-inspired robots**, Nantes, France.
20. Caluwaerts, K., Grand, C., N'Guyen, S., Dollé, L., Guillot, A. and Khamassi, M. (2011). Design of a biologically inspired navigation system for the Psikharpax rodent robot. Full paper + poster at **International workshop on bio-inspired robots**, Nantes, France.
19. Khamassi, M., Quilodran, R., Enel, P., Dominey P.F. and Procyk, E. (2010). Role of the frontal cortex in solving the exploration-exploitation trade-off. Poster at the **4th International Symposium on Motivational and Cognitive Control**, Oxford, UK.
18. Khamassi, M., Quilodran, R., Enel, P., Dominey P.F. and Procyk, E. (2010). Role of the frontal cortex in solving the exploration-exploitation trade-off. Full paper at the **5th French Neurocomp Conference**, Lyon, France.
17. Enel, P., Khamassi, M., Procyk, E. and Dominey P.F. (2010). Reinforcement learning model in probabilistically rewarded task. Poster at the **5th Neurocomp Conference**, Lyon, France.
16. Benchenane, K., Peyrache, A., Khamassi, M., Wiener, S.I. and Battaglia, F.P. (2010). Coherent oscillations and learning-related reorganization of spike timing. Poster at the **4th International Conference on Cognitive Systems, CogSys10**. January 27 & 28, 2010, ETH Zurich, Switzerland.
15. Benchenane, K., Peyrache, A., Khamassi, M., Wiener, S.I. and Battaglia, F.P. (2009). Coherence of Theta Rhythm between Hippocampus and Medial Prefrontal Cortex Modulates Prefrontal Network Activity During Learning in Rats. Conference abstract in **Frontiers in Systems Neuroscience**. 12th Meeting of the Hungarian Neuroscience Society, doi: 10.3389/conf.neuro.01.2009.04.132.
14. Khamassi, M., Quilodran, R., Procyk, E. and Dominey P.F. (2009). Anterior Cingulate Cortex integrates reinforcement learning and task-monitoring: evidence from computational modelling, neural network simulation and primate neurophysiology. **Society for Neuroscience Abstracts**, Chicago, USA.
13. Benchenane, K., Peyrache, A., Khamassi, M., Wiener, S.I. and Battaglia, F.P. (2008). Theta Band LFP Coherence Between Hippocampus And Prefrontal Cortex and Reorganization of Ensemble Cell Activity During Learning. Conference Abstract in **Neuropsychobiology**, 58(3-4):233-233.

12. Khamassi, M., Mulder, A.B., Tabuchi, E., Douchamps, V. and Wiener S.I. (2007). Actor-Critic models of reward prediction signals in the rat ventral striatum require multiple input modules. **Society for Neuroscience Abstracts**, San Diego, USA.
11. Peyrache, A., Benchenane, K., Khamassi, M., Douchamps, V., Tierney, P.L., Battaglia, F.P. and Wiener, S.I. (2007). Rat medial prefrontal cortex neurons are modulated by both hippocampal theta rhythm and sharp waveripple events. **Society for Neuroscience Abstracts**, San Diego, USA.
10. Benchenane, K., Peyrache, A., Khamassi, M., Tierney, P.L., Douchamps, V., Battaglia, F.P. and Wiener, S.I. (2007). Increased firing rate and theta modulation in medial prefrontal neurons during episodes of high coherence in the theta band of hippocampal/prefrontal local field potentials (LFP) in behaving rats. **Society for Neuroscience Abstracts**, San Diego, USA.
9. Battaglia, F.P., Peyrache, A., Benchenane, K., Khamassi, M., Douchamps, V., Tierney, P.L. and Wiener, S.I. (2007). Rat medial prefrontal cortex neurons are modulated by both hippocampal theta rhythm and sharp waveripple events. **Society for Neuroscience Abstracts**, San Diego, USA.
8. Khamassi, M., Battaglia, F.P., Peyrache, A., Douchamps, V., Tierney, P. and Wiener S.I. (2007). Transitions in behaviorally correlated activity in medial prefrontal neurons of rats acquiring and switching strategies in a y-maze. Poster presented at the **Okinawa Computational Neuroscience Workshop**, Okinawa, Japan.
7. Battaglia, F.P., Khamassi, M., Peyrache, A., Douchamps, V., Tierney, P. and Wiener, S.I. (2006). Spatial and reward correlates in medial prefrontal neurons of rats acquiring and switching strategies in a y-maze. **Society for Neuroscience Abstracts**, Atlanta, USA.
6. Wiener, S.I., Khamassi, M., Peyrache, A., Douchamps, V., Tierney, P. and Battaglia, F.P. (2006). Transitions in behaviorally correlated activity in medial prefrontal neurons of rats acquiring and switching strategies in a y-maze. **Society for Neuroscience Abstracts**, Atlanta, USA.
5. Battaglia, F.P., Khamassi, M., Douchamps, V., Tierney, P.L. and Wiener, S.I. (2005). EEG correlations between hippocampus and prefrontal cortex in rats performing a decision-making spatial task. **Society for Neuroscience Abstracts**, Washington DC, USA.
4. Mulder, A.B., Tabuchi, E., Khamassi, M. and Wiener S.I. (2005). Reward site associated activity in the ventral striatum of behaving rats. **Society for Neuroscience Abstracts**, Washington DC, USA.
3. Arleo, A., Déjean, C., Boucheny, C., Khamassi, M., Zugaro, M.B. and Wiener, S.I. (2004). Optic field flow signals update the activity of head direction cells in the rat anterodorsal thalamus. Abstract in **Journal of Vestibular Research**, 14(2/3):P095.
2. Wiener, S.I., Arleo, A., Déjean, C., Boucheny, C., Khamassi, M. and Zugaro, M.B. (2004). Optic field flow signals update the activity of head direction cells in the rat anterodorsal thalamus. **Society for Neuroscience Abstracts**, San Diego, USA.
1. Khamassi, M., Girard, B., Guillot, A. and Berthoz, A. (2003). Mécanismes neuromimétiques d'apprentissage par renforcement dans l'architecture de contrôle du rat artificiel Psikharpax. Poster presented at the **French Conference on Artificial learning (CAp) within the frame of the AFIA platform**, Laval, France.

Invited talks and seminars

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| 2018 | EBPS Computational Psychiatry Workshop, University of Cambridge, UK |
| 2017 | Intelligent Systems Research Centre, Ulster University, Derry, UK |
| 2017 | Panel at the 50 th Winter Conference on Brain Research, Big Sky, USA |
| 2017 | Symposium at the French Neuroscience Society Colloquium, Bordeaux, France |
| 2016 | Dept. Electrical & Computer Engineering, Tarbiat Modares University, Teheran, Iran |
| 2016 | Department of Experimental Psychology, University of Oxford, UK |
| 2016 | "Addiction, in theory" meeting, Gatsby Unit, University College London, UK |
| 2016 | 6 th International Symposium on Motivational and Cognitive Control, St Andrews, UK |
| 2016 | Inst. Com. & Computer Systems, National Polytechnical University of Athens, Greece |
| 2016 | 6 th International Symposium on Biology of Decision-Making, Paris, France |
| 2016 | 5 th International Meeting on Comput. Properties of Prefrontal Cortex, Lyon, France |
| 2016 | 15 th National Forum of Cognitive Sciences, Univ. Paris Descartes 5, Paris, France |

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| 2016 | Symposium at the National GDR Neurosciences de la Mémoire, Bordeaux, France |
| 2015 | 3 rd International Conf. on Cognition, Brain & Comput. (Plenary), Ahmedabad, India |
| 2015 | International Conf. on Computational Intelligence (Keynote), Visakhapatnam, India |
| 2015 | International Conf. on Cognition in Smart Cities (Keynote), Vizag, India |
| 2015 | International NeuroBridges Workshop, Univ. Paris Descartes, Paris, France |
| 2015 | 1 st Computational Neuroscience Symposium at UPMC, Paris, France |
| 2015 | Computational Neuroscience Seminars, Ecole Normale Supérieure Ulm, Paris, France |
| 2014 | Symposium at International Cognitive Neuroscience Conference, Brisbane, Australia |
| 2013 | Brain & Language Research Institute, CNRS, Avignon, France |
| 2013 | 5 th International Symposium on Motivational and Cognitive Control, Paris, France |
| 2013 | Center for Mind/Brain Sciences, University of Trento, Italy |
| 2013 | Centre de Neurosciences Cognitives, CNRS, Lyon, France |
| 2012 | GDR Colloquium, Institut des Neurosciences de la Timone, CNRS, Marseille, France |
| 2012 | Basal Ganglia Days, Institut du Cerveau et de la Moëlle Epinière, Paris, France |
| 2012 | Neuromorphic Engineering Workshop/Summerschool, Telluride, USA |
| 2011 | International Conference on Decision Making, Allahabad, India |
| 2010 | Institut des Neurosciences Cognitives de la Méditerranée CNRS, Marseille, France |
| 2010 | Laboratoire de Recherche en Informatique, Univ. Paris-Sud 11, Orsay, France |
| 2010 | Computational Neuroscience Day, Ecole Normale Supérieure Ulm, Paris, France |
| 2010 | Centre de Recherche en Neurosciences de Lyon, INSERM, Lyon, France |
| 2009 | Laboratoire de Neurosciences Cognitives, Ecole Normale Supérieure, Paris, France |
| 2009 | Laboratoire de Robotique GREYC, Université de Caen, France |
| 2008 | Symposium at the National GDR Neurosciences de la Mémoire, Aussois, France |
| 2008 | Institut Cellules Souches et Cerveau, INSERM, Lyon, France |
| 2008 | Okinawa Institute of Science and Technology, Okinawa, Japan |
| 2007 | Third day in Computational Neuroscience, Collège de France, Paris, France |
| 2006 | “ICEA” FP6 European project workshop, Derby, UK |
| 2004 | Graduate School of Medecine, University of Toyama, Toyama, Japan |
| 2004 | Ecole Supérieure de Physique et Chimie Industrielles, Paris, France |

Scientific events organized

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| 2012-2017 | 2nd - 7th International Symposia on Biology of Decision-Making , Paris, France. Co-organizers: T. Boraud, S. Bourgeois-Gironde, K. Doya, E. Koechlin, M. Pessiglione, N. Rougier. 200 participants, 30 speakers, 80 posters. <i>Top-level meeting in the field.</i> |
| 2012-2017 | 7 “Robotics and Neuroscience” days , Paris area, France, for the French Neuroscience and Robotics communities, in the framework of the CNRS Groupements de Recherches (GDRs) Robotics and Neuroscience of Memory. Co-organizers: Benoît Girard, Ghilès Mostafaoui, Alex Pitti, Olivier Sigaud, Philippe Souères. 40 participants on average. (11/12,11/12,03/14,10/15,04/16,06/16,11/17) |
| 2016 | From Artificial Intelligence to Neuroscience, and back workshop at the Collaborative Research in Computational Neuroscience Conference, Paris, France. Co-organizers: S. Gershman and B. Gutkin. 50 participants, 4 speakers. |
| 2015 | 3rd Orbitofrontal Cortex and Cognition Meeting , Paris, France. Co-organizers: Jay Gottfried, Elisabeth Murray, Mathias Pessiglione, Geoffrey Schoenbaum. 150 participants, 30 speakers, 50 posters. <i>Top-level meeting in the field.</i> |
| 2015 | Scientific Day around Intellectica journal Issue #61 , co-organized with Alexandre Monnin and Gunnar Declerck, CNRS-ISCC, Paris, France. 20 participants. |
| 2013 | Symposium at the Colloquium of the French Neuroscience Society , Lyon, France. Theme: Neural dynamics of spatial navigation: electrophysiological data and computational models. Co-organizers: Francesca Sargolini, Bruno Poucet. 50 particip. |
| 2013 | Interdisciplinary day (Philosophy, Robotics, Biology) on Cognition, Adaptation and Complexity: From Living Beings to Robots, Paris-Sorbonne University, France, April |

11. Principal organizer: Thomas Pradeu. 50 participants.
- 2005 **National Cognitive Science Forum** gathering laboratories, companies and students, concerned with cognitive science. Co-organizers: board members of Cognivence association.
- 2004 **Paris-area Regional Cognitive Science Forum** gathering laboratories, companies and students, concerned with cognitive science. Co-organizers: Vincent Jacob, board members of Cognivence association.
- 2004 **Regional workshop for the French « États Généraux de la Recherche »** (CloEG Paris-Centre; June 21, 27 and 28, 2004). Co-organizers: Marie-Pierre Junier, Catherine Dargemont.

Student supervision

Current PhD students

- 2017- **Rémi Dromnelle**, co-supervised with Raja Chatila (ISIR Université Pierre et Marie Curie - Paris 6). Robotics Program.
- 2016- **François Cinotti**, co-supervised with Benoît Girard (ISIR Université Pierre et Marie Curie - Paris 6). Neuroscience Program.
- 2013- **Nassim Aklil**, co-supervised with Ludovic Denoyer (LIP6 Université Pierre et Marie Curie - Paris 6). Robotics Program. Defense on 27 Sept, 2017.
- 2013- **Thibaud Griessinger**, co-supervised with Giorgio Coricelli (Ecole Normale Supérieure, Université Pierre et Marie Curie - Paris 6). Neurosci. Program. Defense in Dec, 2017.

Past PhD students

- 2013-2016 **Dr. Guillaume Viejo**, co-supervised with Benoît Girard (ISIR Université Pierre et Marie Curie - Paris 6). Neuroscience Program. Now post-doc at McGill University.
- 2012-2016 **Dr. Erwan Renaudo**, co-supervised with Raja Chatila (ISIR Université Pierre et Marie Curie - Paris 6). Robotics Program. Now post-doc at Innsbruck University.
- 2011-2015 **Dr. Jean Bellot**, co-supervised with Benoît Girard (ISIR Université Pierre et Marie Curie - Paris 6). Neuroscience Program. Now working at HEURITECH.
- 2011-2014 **Dr. Florian Lesaint**, co-supervised with Olivier Sigaud (ISIR Université Pierre et Marie Curie - Univ. Paris 6). Neuroscience Program. Now working at DEEZER.

Past Postdoctoral fellows

- 2012-2013 **Dr. Ignasi Cos**, co-supervised with Benoît Girard (ISIR Université Pierre et Marie Curie - Paris 6). Now Marie-Curie research fellow at Pompeu Fabra University, Barcelona.

Current & Past undergraduate students

- 2017 **Eleonore Schiltz** (L3 student Bio/Maths UPMC).
- 2017 **George Velentzas** (engineering student, National Technical University of Athens (NTUA), Greece) co-supervised with Costas Tzafestas (NTUA).
- 2017 **Theodore Tsitsimis** (engineering student, NTUA, Greece) co-supervised with Costas Tzafestas (NTUA).
- 2016 **Avel Guénin--Carlut** (M1 master student ENS). Now Cogmaster student.
- 2016 **Anne Chadoeuf** (M2 Cogmaster ENS) co-supervised with Benoît Girard (ISIR Université Pierre et Marie Curie - Paris 6).
- 2015 **Pierre Luce-Vayrac** (M2 Androide UPMC) co-supervised with Raja Chatila (ISIR Université Pierre et Marie Curie - Paris 6). Now PhD student in the team.
- 2015 **François Cinotti** (M2 Cogmaster ENS) co-supervised with Benoît Girard (ISIR Université Pierre et Marie Curie - Paris 6). Now PhD student in the team.
- 2015 **Rémi Dromnelle** (M1 student in Bio-informatics at University Denis Diderot – Paris 7). Now Master student at University Denis Diderot.
- 2013 **Timothée Dubuc** (M2 student), co-supervised with Arthur Leblois and Olivier Sigaud

- (ISIR Univ Paris 6). Now PhD student at the University of Reading, UK.
- 2013 **Omar Islas-Ramirez** (M2 master student), co-supervised with Benoît Girard (ISIR UMR7222, Université Paris 6). Now PhD student at UPMC.
- 2013 **Sana Bahri** (engineering student), co-supervised with Benoît Girard (ISIR Univ. Paris 6). Now still studying at her engineering school.
- 2012 **Erwan Renaudo** (M2 master student), co-supervised with Benoît Girard (6 months internship, ISIR UMR7222, Université Paris 6). Now PhD student in the team.
- 2011 **Sélim Khamassi** (engineering student), co-supervised with Benoît Girard (2 months internship, ISIR, Univ. Paris 6). Now studying at Ecole Centrale d'Electronique.
- 2011 **Valère Pique** (licence student), co-supervised with Benoît Girard (2 months internship, ISIR, Univ. Paris 6). Now still studying at his university (IUT).
- 2011 **Antoine Favre-Félix** (engineering student), co-supervised with Benoît Girard (2 months internship, ISIR Univ. Paris 6). Now studying at Ecole Centrale Nantes.
- 2011 **Mariacarla Staffa** (graduate student), PhD 4m. internship co-supervised with Agnès Guillot (ISIR Univ. Paris 6). Now post-doc fellow at Univ. Naples Federico II.
- 2010 **Ken Caluwaerts** (M2 master student), co-supervised with Agnès Guillot and Christophe Grand (ISIR Univ. Paris 6). Now Post-doc fellow at NASA, USA.
- 2009 **Pierre Enel** (M2 master student), co-supervised with Emmanuel Procyk and Peter F. Dominey (INSERM - Univ. Lyon 1). Now PhD student at Univ Lyon 1.
- 2007 **Manuel Rolland** (engineering student), co-supervised with Agnès Guillot (, ISIR, Univ. Paris 6). Now works at Aldebaran Robotics.
- 2006 **Laurent Dollé** (M2 master student), co-supervised with Agnès Guillot (LIP6, Univ. Paris 6). Now post-doc fellow at EDF R&D and Collège de France.
- 2006 **Anthony Truchet** (M2 master student), co-supervised with Agnès Guillot (LIP6, Univ. Paris 6). Then PhD student at ENSTA. Now working at CRITEO.
- 2005 **Louis-Emmanuel Martinet** (engineering student) co-supervised with Agnès Guillot (LIP6, Univ. Paris 6). Now post-doc fellow at Boston University.
- 2005 **Laurent Dollé** (M1 master student), co-supervised with Agnès Guillot (LIP6, Univ. Paris 6). Now post-doc fellow at EDF R&D and Collège de France.
- 2005 **Vincent Douchamps** (M2 master student), co-supervised with Sidney Wiener (LPPA, Collège de France). Now post-doc fellow at Durham University.
- 2004 **Paul Simard** (M2 master student), co-supervised with Agnès Guillot (LIP6, Univ. Paris 6). Now R&D engineer at Dassault Systems.

PhD & HDR theses evaluation committees (HDR = Habilitation to Direct Researches)

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- 2017 Reviewer for the jury of **Arthur Prat-Carrabin's PhD thesis** (supervisor: Rava da Silveira), Ecole Normale Supérieure, Paris, France.
- 2017 Examiner for the jury of **Gabriel Sulem's PhD thesis** (supervisor: Etienne Koechlin), Ecole Normale Supérieure / UPMC, Paris, France.
- 2017 Examiner for **Lisa Jacquey's PhD mid-term evaluation committee** (supervisor: Kevin O'Regan), Université Paris Descartes, France.
- 2017 Examiner for **Chen Hu's PhD mid-term evaluation committee** (supervisor: Mathias Pessiglione), Université Pierre et Marie Curie, Paris, France.
- 2017 Examiner for **Hakim Guedjou's PhD mid-term evaluation committee** (supervisor: Mohamed Chetouani), Université Pierre et Marie Curie, Paris, France.
- 2016 Reviewer for the jury of **Emilio Cartoni's PhD thesis** (supervisor: Gianluca Baldassarre), Università degli Studi di Roma "La Sapienza", Rome, Italy.
- 2016 Examiner for the jury of **Steve Didienne's PhD thesis** (supervisor: Philippe Faure), Université Pierre et Marie Curie, Paris, France.
- 2016 Reviewer for the jury of **Maxime Carrere's PhD thesis** (supervisor: Frédéric Alexandre), Université de Bordeaux, France.
- 2016 President of the jury of **Ralph Bourdoukan's PhD thesis** (supervisor: Sophie Denève),

- Ecole Normale Supérieure / UPMC, Paris, France.
- 2015 Examiner for **Virginie Oberto's 2nd PhD mid-term evaluation committee** (supervisor: Sidney I. Wiener), Université Pierre et Marie Curie, Paris, France.
- 2015 Examiner for the jury of **Vassilisa Skvortsova's PhD thesis** (supervisors: Mathias Pessiglione and Hilke Plassmann), Université Pierre et Marie Curie, Paris, France.
- 2015 Reviewer for the jury of **Céline Amiez's Habilitation to Direct Researches (HDR)**, Université Claude Bernard – Lyon 1, France.
- 2015 Reviewer for the jury of **Emmanuel Breyse's PhD thesis** (supervisor: Christelle Baunez), Université Aix-Marseille, France.
- 2015 Examiner for the **Virginie Oberto's PhD mid-term evaluation committee** (supervisor: Sidney I. Wiener), Collège de France / UPMC, Paris, France.
- 2014 Reviewer for the jury of **Simon Gay's PhD thesis** (supervisors: Olivier Georgeon & Alain Mille), Université Claude Bernard – Lyon 1, France.
- 2014 Examiner for the jury of **Raphaël Le Bouc's PhD thesis** (supervisor: Mathias Pessiglione), Université Pierre et Marie Curie, Paris, France.
- 2014 Examiner for **Flora Bouchacourt's PhD mid-term evaluation committee** (supervisors: Srdjan Ostojic & Boris Gutkin), Paris, France.
- 2013 Examiner for **Alexandre Salvador's PhD mid-term evaluation committee** (supervisors: Raphaël Gaillard & Stefano Palminteri), ENS / UPMC, Paris, France.
- 2012 Examiner for the jury of **Stefano Palminteri's PhD thesis** (supervisor: Mathias Pessiglione), Université Pierre et Marie Curie, Paris, France.
- 2012 Examiner for **Vasilisa Skvortsova's PhD mid-term evaluation committee** (supervisor: Mathias Pessiglione), Université Pierre et Marie Curie, Paris, France.
- 2012 Examiner for **Éléonore Duvelle's PhD mid-term evaluation committee** (supervisors: Angelo Arleo & Etienne Save), Université Pierre et Marie Curie, Paris, France.
- 2008 Examiner for the jury of **Mathieu Bertin's PhD thesis** (supervisors: Kenji Doya & Agnès Guillot), Université Pierre et Marie Curie, Paris, France.

Teaching (CS: Computer Science; NE: Neuroscience; RO: Robotics; CO: Cognitive Science)

Creation of two new courses currently taught

- 2015- **École Normale Supérieure Ulm - Paris**, CogMaster (Co-coordinator with B. Girard)
CO: Robotic modelling approaches to Cognitive Sciences (Lectures: 12h).
- 2014- **UPMC**, License 1 (all disciplines; Co-coordinator with Frédéric Decremps)
CO: Role of science in society and critical thinking (Lectures: 20h + Lab: 20h).

Other current lectures

- 2015- **Univ. Paris-Sud (Orsay)**, Master 2 of Computer Science (Machine Learning)
CS: Neuro-inspired reinforcement learning (Lecture: 2h).
- 2014- **Univ. Pierre & Marie Curie (UPMC)**, Master 2 of Computer Science (ANDROIDE)
CS: Neuro-inspired reinforcement learning (Lecture: 2h).
- 2013- **Ecole X Polytechnique, Palaiseau**, Engineering school
NE: Reinforcement Learning and Brain related mechanisms (Lecture: 2h).
- 2012- **École Normale Supérieure Ulm - Paris**, Master 1 of Neuroscience
NE: Decision-making: Elements of modelling (Lecture: 3h).
- 2011- **UPMC**, Master 2 of Mechatronics Sys. for Rehabilitation
RO: Bio-inspired action selection and learning (Lecture: 2h).

Past lectures

- 2017 **SMART Summer School in Computational Social & Behav. Sciences, UPMC**
CS : Model-free & model-based reinforcement Learning (Lecture: 1h + Tutorial: 3h).
- 2014 **École Normale Supérieure Ulm / PSL - Paris**, Master 1 of Cognitive Engineering
RO: Reinforcement Learning, Neuroscience & Robotics applications (Lecture: 2h).

- 2013 **Harvard Summer Program in Trento, Italy**
NE: Reinforcement Learning models (Lecture: 1h30 + Tutorial: 2h).
- 2013 **Univ. Pierre & Marie Curie (UPMC), Master 2 Integrative Neuroscience**
NE: Comput. approach to parallel memory systems for navigation (Lecture: 3h).
- 2013-2014 **Université Claude Bernard - Lyon 1, License 1 and 2 (all disciplines)**
CO: Analyzing the influence of advertising on brain and behavior (Lecture: 1h).
- 2012 **Telluride Neuromorphic Engineering Summerschool, USA**
CS: Model-free & model-based reinforcement learning (Lecture: 1h + Tutorial: 4h).
- 2012-2015 **Polytech UPMC – Paris 6, 5th year of Engineering School**
RO: Reinforcement Learning and Decision-Making (Lecture: 2h + Lab: 4h).
- 2010-2014 **Université Claude Bernard - Lyon 1, Master 2 of Integrative Neuroscience**
NE: Decision-making: elements of modelling (Lecture: 1h30 + Debate: 2h).
- 2008-2014 **UPMC, Master 2 of Artificial Intelligence and Decision**
CS: Neuro-inspired reinforcement learning (Lecture: 2h + Project supervision: 4h).

Past practical/laboratory courses

- 2006 **ESIEA, Laval, CS: Artificial and cognitive life in M1 (18h).**
- 2006 **La Sorbonne, Paris, CS: Computer Science in L2 (18h).**
- 2006 **Université Paris 6, CS: Computed Science in L2 (38h).**
- 2006 **ESIEA, Laval, CS: Artificial and cognitive life in M1 (12h).**
- 2005 **La Sorbonne, Paris, CS: Computer Science in L2 (36h).**
- 2004 **ENSIIE-CNAM, Evry CS: Computer Science in L3 (20h).**
- 2003 **La Sorbonne, Paris, CS: Computer Science in L2 (36h).**
- 2003 **Université d'Évry, France CS: Bio-Informatics in M2 (12h).**

Editorial activity

- 2016 **Co-Editor of a special issue** with Stéphane Doncieux on New Approaches to Cognitive Robotics to be published in 2016 in the Intellectica journal.
- 2015- **Associate Editor for Frontiers in Neurorobotics.** Specialty Chief Editor: Alois C Knoll. Assistant Specialty Chief Editor: Florian Röhrbein.
- 2014- **Review Editor for Frontiers in Behavioral Neuroscience.** Editors-in-Chief: Carmen Sandi and Nuno Sousa and **Frontiers in Decision Neuroscience (since 2016).**
- 2013- **Editorial Board Member for Intellectica.** Editor-in-Chief: Olivier Gapenne.
- 2008-2014 **Review Editor for Frontiers in Neurorobotics.** Specialty Chief Editor: Frederic Kaplan.

Ad-hoc reviewer

- Journals (alphabetical order) Behavioral Neuroscience, Biological Cybernetics, Brain Research, Cerebral Cortex, Connection Science, Frontiers in Cognitive Science, Frontiers in Evolutionary Psychology and Neuroscience, Frontiers in Neurorobotics, Frontiers in Systems Neuroscience, IEEE Transactions on Autonomous Mental Development, IEEE Transactions on Industrial Electronics, IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Robotics, Intellectica, International Journal of Social Robotics, Journal of Neuroscience, Nature Communications, Neural Computation, Neurosignals, Pattern Recognition Letters, PLoS Computational Biology, PLoS One, Progress in Brain Research, Progress in Neurobiology, Progress in Neuropsychopharmacology & Biological Psychiatry, ReScience, Review of Philosophy and Psychology, Scientific Reports.
- Grants Human Frontiers Science Program, EU CHIST-ERA, IFREMER, UK's Economic and Social Research Council.
- Conferences / workshops Behavior Adaptation, Interaction and Learning for Assistive Robotics Workshop (BAILAR), Biologically Inspired Cognitive Architectures Conference (BICA),

International Conference on Development and Learning – Epigenetic Robotics (ICDL-EPIROB), Living Machines Conference (LM), Multimodal processing, modeling and learning for human-computer/robot interaction Workshop (MULTI-LEARN), Orbitofrontal Cortex Meeting (OFC), Simulation of Adaptive Behavior Conference (SAB), Symposium on Biology of Decision-Making (SBDM), IFAC Symposium on System, Structure and Control (SSSC).

Program Committee member for international conferences / workshops

(chronological order) **Conferences:** SAB 2010, SBDM 2012, SBDM 2013, Living Machines 2013, SBDM 2014, SBDM 2015, BICA 2015, OFC 2015, SBDM 2016, SBDM 2017. **Workshops:** Navigation workshop (Arleo, Chavarriaga) at SAB 2006, “Behavior Adaptation, Interaction and Learning for Assistive Robotics” BAILAR 2016 and BAILAR 2017 workshops (Rossi, Siciliano, Staffa) at RO-MAN 2016 and RO-MAN 2017, “From Artificial Intelligence to Neuroscience, and back” workshop (Gershman, Gutkin, Khamassi) at CRCNS 2016, Multi-Learn workshop (Papageorgiou, Pitsikalis, Roussos, Zlatintsi, Khamassi) at EUSIPCO 2017.

Other academic professional activities

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| 2016 | Evaluation comity member for an associate professor position recruitment in Robot cognitive architectures at Université Pierre et Marie Curie (UPMC). |
| 2015 | Member of the SMART Labex Doctoral Committee for evaluating 20 applications for PhD funding at UPMC. |
| 2014 | Evaluation comity member for an associate professor position recruitment in Neurorobotics at Université de Cergy-Pontoise / ENSEA. |
| 2013-2016 | Evaluation jury for 40 Master 2 students’ research projects, CogMaster, ENS Paris. |
| 2013 | Evaluation comity member for an associate professor position recruitment in Computational Neuroscience at Université de Lorraine / INRIA LORIA. |
| 2013 | Co-organized with Vincent Hayward ISIR’s tutorial on preparation for the writing of individual research grant applications (20 participants). |
| 2010-2012 | Member of the “platform committee” of ISIR, managing inventory, presentation, costs and grant applications of the institute’s robotic platforms. |
| 2006-2007 | PhD students representative, with Zoë Cimatti and Matthieu Lafon, at the ED3C (Brain, Cognition, Behavior) doctoral school of UPMC Univ. Paris 6. |
| 2005-2006 | Board Member of Doc’Up, the association of PhD students of UPMC Univ. Paris 6. |
| 2002-2005 | Board Member (2002-2005) and President (2003-2004) of Cognivence, association of students and young researchers in cognitive science in Paris' area. |
| 2003-2005 | Board Member and co-founder of FRESCO (2003-2005), national federation of students and young researchers in cognitive science. |
| 2004 | Vice-president of Paris-area regional committee (CloEG) for the organization of the French « États Généraux de la Recherche et de l’Enseignement Supérieur 2004 ». |
| 2004 | Member of the national committee (CIP-CloEG) for the national synthesis of texts elaborated regionally during the French « États Généraux de la Recherche et de l’Enseignement Supérieur 2004 ». The synthesized document was then submitted to the French Ministry of Research in November 2004. |

Vulgarization and wide-audience presentations

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| 2017 | Interview and scientific advisor for the project of introduction to science (TPE) of a high-school student: Ilan Volson. Theme: Impact of advertising on brain & behavior. |
| 2016 | Featured interview in the online educative scientific video game http://www.memorya.org/ by ART’M and B2V. |
| 2016 | Wide-audience conference on embodied artificial intelligence at the 15 th National |

- Forum of Cognitive Sciences, Univ. Paris Descartes 5, Paris.
- 2016 Wide-audience conference on scientific, historical and ethical issues of Neuromarketing at Université du Temps Libre de l'Essonne (91), Epinay-sur-Orge.
- 2016 Wide-audience conference on scientific, historical and ethical issues of Neuromarketing at Université du Temps Libre de l'Essonne (91), Montgeron-Draveil.
- 2015 Invited expert by UNICEF (Genève, Switzerland) for a report on the impact of advertising and marketing practices on children.
- 2015 Wide-audience talk + round table on scientific, historical and ethical issues of Neuromarketing at the Alternatiba Festival, Les Ulis, Essonne (91).
- 2015 Interview and scientific advisor for the project of introduction to science (TFE) of a high-school student: Victoria Peek. Theme: Influence of advert. on brain and behav.
- 2014 "Bar des Sciences" about Robotics and Neuroscience, Montbéliard.
- 2014 Interview and scientific advisor for the project of introduction to science (TFE) of a high-school student: Bertrand Raysz. Theme: Today Robotics vs. Asimov's Robots.
- 2014 Invited speaker at the closing "Table ronde" of the Cognitive Science Forum.
- 2013 Interview and scientific advisor for the project of introduction to science (TFE) of 2 high-school students: Satnam Singh and Yanis Mendil. Theme: Influence of advertising on brain and behavior.
- 2013 Invited expert at the United Nations (New York, USA) by the High Commissioner for Human Rights to write a report on the impact of advertising and marketing practices on the enjoyment of cultural rights.
- 2013 Scientific exhibition on Memory, organized by ART'M (Jacques Roux et al), Chambéry, France. Interview, scientific advisor, and robot demonstration.
- 2013 Two 1-hour presentations at Marcelin Berthelot High School (Pantin) about Education to image and critical thinking towards advertising.
- 2013 Interview and scientific advisor for the project of introduction to science (TPE) of 2 high-school students: Florian Desrosiers et al. Theme: The Psikharpax rat robot.
- 2012 Wide-audience conference on Neuro-robotics. Fête de Luttes Ouvrières (93).
- 2011 "Café des Sciences" about Robotics, Mediathèque de Combs-la-Ville (93).
- 2011 Wide-audience conference on Neuro-robotics. Fête de Luttes Ouvrières (93).
- 2011 National science celebration (« Fête de la Science »). 1 day demonstration of the Psikharpax rat robot at Université Pierre et Marie Curie.
- 2010 Wide-audience day on Robots and Humans ("Des Robots et des Hommes") at Cité des Sciences, Paris. Demonstration on the Psikharpax rat robot, with Agnès Guillot, Christophe Grand, Steve N'Guyen and Mathieu Bernard.
- 2010 National science celebration (« Fête de la Science »). 2 days demonstration of the Psikharpax rat robot at Université Pierre et Marie Curie.
- 2009 "Café des Sciences" about Artificial Intelligence, MJC de Combs-la-Ville (93).
- 2007 National science celebration (« Fête de la Science »). 1 day demonstration of the Psikharpax rat robot at Université Pierre et Marie Curie.

Media coverage

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- 2016 Interview in Science, 352(6290):1161, about science and diplomacy in relation to the Middle-East conflict, following the NeuroBridges workshop organized in Paris by Ahmed El Hady and Yonathan Loewenstein.
- 2016 Article written with Raja Chatila about consciousness in robots published on Interstices, INRIA's webzine for scientific culture dedicated to IT and mathematics.
- 2016 Our work with Indian architect Sudhir K. Pasala and psychologist V.S. Chandrasekhar Pammi has been mentioned (text and figure) in an article on "How neuroscience can influence architecture" in the journal of the American institute of architects.
- 2016 Article written with Frédéric Decremps for The Conversation on the Scientific approach and critical thinking, (contrib. from Marie Pinhas & Fabrice Rousselot).

- 2016 UPMC website: interview entitled “Errare scientificum est!” on the Scientific approach and critical thinking course I co-animate with Pr. Frédéric Decremps.
- 2016 “L’âge de faire” journal (N°113). Interview about current scientific knowledge on the influence of advertising on brain activity and behavior (conditioning, reward system, and multiple types of memorizations).
- 2015 Politis information journal. Full-page interview about current scientific knowledge on the influence of advertising on brain activity and behavior (conditioning, reward system, and processing of urban adverts during habitual navigation).
- 2015 Article written with Raja Chatila about consciousness in robots for Pour La Science.
- 2015 Article in Navette Science written by Ombelliscience Picardie about our collaborative work with INSERM Lyon.
- 2014 Est Républicain newspaper article about the Robotics and Neuroscience Bar des Sciences to which I participated in Montbéliard.
- 2013 Radio Campus Paris. Interview about Computational Neuroscience and Neurorobotics for the “La Puce à l’Oreille” show.
- 2013 Politis information journal. Video interview about current scientific knowledge on the influence of advertising on brain activity and behavior (conditioning, reward system, and processing of urban adverts during habitual navigation).
- 2012 Planète Robots magazine. Interview about the Psikharpax rat robot.
- 2012 LeMonde.fr. Article about Current estimations of nociceptive effects of advertising on the society. Co-writers: Guillaume Dumas, Karim N’Diaye, Luc Foubert, Yves Jouffe and Camille Roth.
- 2012 Le Monde. Interview for the article “What robots can teach us about ourselves” by Viviane Thivent.
- 2011 Futura-sciences.com web scientific magazine. Vulgarization article about the Psikharpax rat robot (2 versions: FR and UK).
- 2011 INSERM Health & Science Magazine. Interview about a neuromimetic prefrontal cortex model controlling the iCub humanoid robot.
- 2011 Marion Montaigne’s humouristic scientific blog. Interview about robotics research work at the Institute of Intelligent Systems and Robotics. With Benoît Girard, Stéphane Doncieux and Jean-Baptiste Mouret.
- 2010 Arte TV channel. Interview + robot demonstration for the “Global Mag” show.
- 2009 Tekiano.com, Tunisian scientific web magazine. Interview about neuro-inspired approaches to robotics.
- 2009 France 5 TV channel. Interview and demonstration of a robot controlled by a neuromimetic learning model for the “Magazine de la Santé” show.
- 2009 France 3 Rhône-Alpes TV channel. Interview and demonstration of a robot controlled by a neuromimetic learning model for the mid-day news program.
- 2009 Press conference with Peter F. Dominey on the iCub humanoid robot in front of 30 journalists including AFP and Reuters at INSERM Stem-cell and Brain Research Institute, Lyon.
- 2008 France Culture Radio. Interview for the “Science and Consciousness” show, with Agnès Guillot and Jean-Arcady Meyer.

Scientific societies memberships

(alphabetical order) EU Technical Committee on Cognitive Robotics, FENS, French Society for Neuroscience, French Neuroscience of Memory GDR, French Robotics GDR, Society for Neuroscience.

Scientific collaborators

France **Rachid Alami, Aurélie Clodic, Sandra Devine**

CNRS LAAS, Toulouse, France

Céline Amiez, Peter Dominey, Jean-Claude Dreher, Mateus Joffily, Manu Procyk

CNRS / INSERM / Univ. Lyon 1, Lyon, France

Paul Apicella, Andrea Brovelli, Kevin Marche, Francesca Sargolini

CNRS / Université Aix-Marseille, Marseille, France

Angelo Arleo, Raja Chatila, Ludovic Denoyer, Stéphane Doncieux, Jacques Droulez,

Patrick Gallinari, Benoît Girard, Olivier Sigaud

CNRS / Université Pierre et Marie Curie – Paris 6, France

Alain Berthoz, Sidney I. Wiener, Michael Zugaro

CNRS / Collège de France, Paris, France

Arnaud Blanchard, Philippe Gaussier

CNRS / Univ. Cergy-Pontoise, Cergy, France

Etienne Coutureau, Virginie Fresno, Alain Marchand

CNRS / Université Bordeaux 2, France

Elisabeth Pacherie, Stefano Palminteri

CNRS / Ecole Normale Supérieure, Paris, France

Abroad

Francesco P. Battaglia, Guillaume Sescousse

Radboud Universiteit, Nijmegen, The Netherlands

Nadège Bault, Giorgio Coricelli, Tobias Larsen, David Pascucci, Massimo Turatto

Univ. of Trento, Italy

Riadh Ben Rejeb, Rym Ben Sghayer

Université de Tunis, Tunisia

V.S. Chandrasekhar Pammi, Sudhir K. Pasala

University of Allahabad / Andhra University, India

Ricardo Chavarriaga

Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

Kenji Doya

Okinawa Institute of Science and Technology, Okinawa, Japan

Mark D. Humphries

University of Manchester, United Kingdom

Adrien Peyrache

McGill University, Montreal, Canada

Terry E. Robinson, Shelly B. Fligel

NIH-NIDA / Univ. Michigan, Ann Arbor, United States of America

Geoffrey Schoenbaum, Matthew R. Roesch, Donna J. Calu

NIH-NIDA / Univ. Maryland, Baltimore, United States of America

Costas Tzafestas

National Technical University of Athens, Greece