



CURRICULUM VITAE

Name: **Arne Öhman**

Birth: May 31, 1943, Ljusdal, Sweden

Citizenship: Swedish

Family: Married to **Gunilla Bohlin**, Ph.D.. Professor.
Children: **Martin**, born 1973;
Kristina, born 1980

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Position: **Professor Emeritus, Senior Scientist**, Section of Psychology,
Department of Clinical Neuroscience, Karolinska Institute,
S-171 77 Stockholm, Sweden

Academic degrees:

Filosofie kandidat (B.A.), 1967 (Psychology, Pedagogy, Sociology),
University of Uppsala, Sweden

Filosofie licentiat (M.A.) 1969 (Psychology), University of Uppsala,
Sweden

Filosofie doktor (Ph.D.), 1971 (Psychology), University of Uppsala,
Sweden

(Dissertation: *Orienting reactions, cognitive processes, and
conditioned behavior in long interstimulus interval electrodermal
conditioning*, publicly defended October 16, 1971.

Docent, 1972 (Psychology), University of Uppsala, Sweden

Academic Positions:

Amanuens and Assistent, Department of Psychology, **University of Uppsala**, 1966-1970

British Council Bursar, Psychiatry Department, **Institute of Psychiatry, London**, England, 1970

Lecturer (e univ lektor), Department of Psychology, **University of Uppsala**, Sweden, 1970-1972

Research Fellow (forskarassistent), Department of Psychology, **University of Uppsala**, Sweden, 1972-1975

Visiting Research Fellow, Department of Psychology, **University of Wisconsin-Madison**, U.S.A., 1975-1976

Professor of Psychology (Somatic Psychology), Department of Somatic Psychology, **University of Bergen**, Norway, 1976-1982

Professor of Clinical Psychology, Department of Clinical Psychology, **University of Uppsala**, Sweden, 1982-1993.

Professor of Psychology, Section of Psychology, Department of Clinical Neuroscience, **Karolinska Institutet**, Stockholm, Sweden, 1993-2010.

Professor Emeritus and Senior Scientist, Section of Psychology, Department of Clinical Neuroscience, **Karolinska Institutet**, Stockholm, Sweden, 2010-

Head, Department of Clinical Neuroscience, **Karolinska Institutet**, Stockholm, Sweden, 2001-2004

Fellow, The Center for Advanced Study in the Behavioral Sciences, Stanford, California, U. S. A., 2005-2006

Awards

Award for Distinguished Contributions to Psychophysiology, awarded at the 41st Meeting with the Society for Psychophysiological Research, Montreal, October 10-14, 2001

Research Grant for “Leading Investigator”, Swedish Research Council, 2003 (Half time salary 2004-2009)

Doctor Philosophicus Honoris Causa, University of Bergen, Norway, August 27, 2004

Memberships:

Academies

Member. *The Royal Swedish Academy of Sciences*, 1998-

Member, *Academia Europaea*, 1992-

Foreign Member, *The Finish Academy of Science and Letters*, Helsinki, Finland, 1988-

Nobel Assembly

Elected Member, *The Nobel Assembly*, Karolinska Institutet, 1997-2010

Scientific Organizations and Societies

American Association for the Advancement of Science

Fellow, Association for Psychological Science

Swedish Psychological Association

Swedish Society of Behavioral Medicine

Nordic Society for Psychophysiological Research

The Society for Psychophysiological Research

Offices:

Board of Directors, Swedish Association for Behavior Therapy, 1973-1975

Scientific Council, The Swedish Psychological Association, 1974-1975,
1985-2001, *Chairman*, 1992-1998

Publication Board, Society for Psychophysiological Research, 1978-1981

Board of Directors, Society for Psychophysiological Research, 1980-1983

President Elect, *President*, Past President, Society of Psychophysiological
Research, 1983-1986

Board of Directors (Vice-President), Swedish Society of Behavioral
Medicine, 1986-90

Steering Committee, International Society of Behavioral Medicine, 1988-
1990

Administrative Experience

Head of the Department of Clinical Neuroscience, Karolinska institutet,
2001-2004

Chairman, Governing Board, Department of Psychology, University of
Uppsala, 1973-1974

Prodekanus, Faculty of Psychology, University of Bergen, Norway, 1980-
81.

Chairman, Department of Somatic psychology, University of Bergen,
Norway, 1976-1980.

Member of Faculty Council, Faculties of Social Science and Psychology,
University of Bergen, Norway, 1976-1980, and Faculty of Social Sciences,
University Uppsala, 1984-87 and 1990-92

Member of Board, Department of Clinical Psychology, University of
Uppsala, 1982-1990

Director of Computer and Workshop Unit at the Departments of
Psychology, University of Uppsala, 1988-92

Member of many committees at the Universities of Bergen and Uppsala, and at the Karolinska Institute, e.g. Chairman Curriculum Committee, and Workshop Committee, Faculty of Psychology, University of Bergen, Docentämnden and the Committee for the Sasakawa Award, Faculty of Social Sciences, University of Uppsala, Board of Doctoral Training, Committee for Doctoral Training Program-”North”, and Program Boards, Physical Therapy, Psychologist program, Karolinska Institute.

Work for Research Funding Agencies

Member of Committee on Social Medicine, Swedish Medical Research Council, 1983-86

Member of Committee on Research in Nursing, Swedish Fund for Cancer Research, 1986-1988

Member of Committee on Psychology, Swedish Council for Research in the Humanities and Social Sciences (HSFR), 1986-1989

Elected Member, The Swedish Council for Research in the Humanities and Social Sciences (HSFR), 1989-1995

Deputy-Chairman, The Swedish Council for Research in the Humanities and Social Sciences, 1990-1995

Elected Member, The Swedish Council for Planning and Coordination of Research (FRN), 1990-1995

Chairman, Program for Research on Individual, Society, and Health, The Swedish Council for Planning and Coordination of Research (FRN), 1992-1999.

Member, Standing Committee for Social Science, European Science Foundation, 1992-1995

Member, Committe for Social Science and Social Medicine, The Bank of Sweden Tercentennial Foundation, 1999-2001

Invited International Expert Member, Evaluation Committe for Psychology, Australian Research Council, 1993.

Invited International Expert Member in Committee to Consider means to Promote the Basal Discipline of Psychology, Norwegian Research Council, 1995-2001.

Occasional Reviews of Grant Proposals for National Science Foundation, USA, The Mental Health Foundation, UK, The Natural Science and Engineering Research Council, Canada, Australian Research Council, The Bank of Sweden Tercentenary Foundation, Sweden, Swedish Ministry of Health and Social Affairs, the Commision for Social Research, Sweden, The Swedish Council for Planning and Coordination of Research (FRN).

Organization of Conferences

Co-organizer (with Prof. David Magnusson) Fourth Stockholm Meeting on Interactional Psychology, "Psychopathology in the perspective of person-environment interactions", Stockholm, Sweden, August, 1984.

Program Co-Chairman, and *Chairman of Organizational Committee*, First World Congress of Behavioral Medicine, Uppsala, Sweden, June, 1990.

Vice-President, Program Chairman and Member of The Executive Committee for the XXVII International Congress of Psychology, Stockholm, 23-28 July 2000.

Program Chairman and Member of Organizational Committee, Man and Mind: Toward a neuroscience of consciousness, Karolinska Millennium Conference sponsored by the Swedish Government, September 24-27, 2000.

Co-organizer, Workshop of Life Style Interventions and Prevention of Coronary Heart Disease, Work Life 2000, Brussels, July 3-4, 2000.

Organizer, Nobel Conference in Medicine on “The Neuroscience of Emotion”, Karolinska institutet. Stockholm, June 9-11, 2005

Co-organizer, Nobel symposium on “The Enlightened Brain”, Karolinska institutet, June 6-10, 2010.

Grant Support

Support as Leading Investigator by the Swedish Research Council, SEK 6.000.000, 2004-2009.

Director at the Karolinska Node of the Nordic Center of Excellence in Cognitive Control Financed by the Nordic Research Councils (NOS-HS) (L. Nygren, principal investigator), SEK 2,500,000 2005-2010

Grant from the U.S. National Institute of Mental health as investigator in the Interdisciplinary Behavioral Science Center for Research in Emotion and Attention at the University of Florida, Gainesville (P. J. Lang, principal investigator). Project title: *Exploring the Fear Module of the Human Brain*. USD 750.000 2005-2010

Continuous support from the Swedish Council for Research in the Humanities and Social Sciences for programmatic research on *autonomic conditioning, prepared learning and phobias*, 1969-1977 and for research on *preparedness, emotion and preattentive processing*, 1981- (currently about Sw. Cr. 800.000 per annum)

Grants on Preparedness and Phobias and the Psychophysiology of Schizophrenia from the Norwegian Research Council for Science and the Humanities, 1977-81.

Grants from The Bank of Sweden Tercentenary Foundation for *Heart and Life-style. Strategies of psychological change in Coronary Heart Disease, and Individual emotional reactivity, cardiovascular activation and cardiovascular disease 1983-1991, The Face of Wrath* (1993-1996), and “*Consciousness and the Brain 1999-2002*” (Total Sw. Cr. 7,700.000), and The Swedish Council for Planning and Coordination of Research (FRN) for *Family interaction, cardiovascular stress reactions, and cardiovascular disease, 1991-1993* (Total Sw. Cr. 1.200.000:-)

Grants from The Swedish Medical Research Council and The Commission for Social Research, The Ministry of Health and Social Affairs and The Bank of Sweden Tercentenary Foundation for *Vulnerability, stress and schizophrenia: Prognostic factors for relapse in schizophrenic patients, and Social adjustment in schizophrenics: Prognostic factors and developmental background, 1986-1993, Psychophysiological Studies of Psychosis and Borderline States*, (Total Sw. Cr. 1.200.000:-).

Editorial responsibilities:

Associate Editor, Emotion, 2000-2002, *European Psychologist*, 1995-2000, *Psychophysiology*, 1980-1983, *International Journal of Psychophysiology* 1982-90, *Journal of Psychophysiology*, 1987-90,

Consulting Editor, Journal of Abnormal Psychology, 1989-94; Emotion, 2006-

Member of Editorial Boards, British Journal of Clinical Psychology, 1991-98, Cognition and Emotion, 1992-, Revista de Psicopatología y Psicología Clínica, 1995-

Corresponding Associate Commentator, The Behavioral and Brain Sciences, 1979-

Guest Editor for special issue on European psychophysiology, *Psychophysiology*, 1979-1981, published as no 4, vol 18, 1981

Occasional Reviews: Behavioral and Brain Sciences, Behavioural Research and Therapy, Biological Psychology, Biological Psychiatry, Brain Research, Cognition and Emotion, Developmental Science, Emotion, The European Journal of Cognitive Psychology, Journal of Behavior Therapy and Experimental Psychiatry, Journal of Abnormal Psychology, Journal of Cognitive Neuroscience, Journal of Experimental Psychology, Journal of Neuroscience, Journal of Psychophysiology, Learning and Motivation, Nature Neuroscience, Nature Reviews Neuroscience, Psychological Review, Psychological Science, Psychophysiology, Psychiatry Research, Quarterly Journal of Experimental Psychology, Scandinavian Journal of Psychology, Science, Visual Cognition

Research and Scholarly interests:

Experimental analysis of psychopathology, especially phobias and schizophrenia; physiological correlates of information processing; the psychology of emotion, brain mechanisms of fear; Life style changes and cardiac rehabilitation; Genetics of Fear Conditioning.

Teaching experience:

Pychophysiology, Stress, and Behavioral Medicine (University of Bergen)

The psychology of learning, Cognitive psychology, Abnormal psychology and Health Psychology, (University of Uppsala)

Psychology as part of neuroscience, psychiatry (Karolinska Institute)

Supervisor of 20 finished Ph. D. students (Staffan Hygge, 1976; Kenneth Hugdahl, 1977, Mats Fredrikson, 1980; Sven Svebak, 1982; Ulf Dimberg, 1983; Lennart Öhlund, 1991; Joaquim J. F. Soares, 1992; Francisco Esteves, 1993; Cristina Parra, 1993; Örjan Sundin, 1993; Christina Hultman, 1996; Anders Flykt 1998; Carina Bildt-Torbjörnsson, 1999; Claes Hofman-Bang, 1999; Daniel Lundqvist, 2003, Katrina Carlsson, 2005; Nina Erixon-Lindroth, 2007; Liselotte Maurex, 2009; Pernilla Juth, 2010, Sandra C. Soares, 2010), Tina Lonsdrof, 2010.

Invited Presentations:

Many *Invited Addresses*, e.g., Key Note Address, 29th International Congress of Psychology, Berlin, Germany, 2008, Invited Address, Alfried Krupp Wissenschaftskolleg Greifswald, Germany, May 2007; Key-Note Address at Germany Experimental Psychology society, Trier Germany, March 2007, Key-Note Address, 28th International Congress of Psychology, Beijing, China, 2004; Summer Institute in Cognitive Neuroscience, Dartmouth College, Hanover, NH, USA, 2002; Invited Address, Feelings and Emotions: The Amsterdam Symposium, Amsterdam, 2001; Invited Address, Society for Psychophysiological Research, Granada, Spain, 1999; Keynote Adress, Nordic Congress of Psychology, Helsinki, 1998; Keynote Address, 5th European Congress of Psychology, Dublin, Ireland, 1997; Keynote Address, 7th European Conference on Personality, Madrid, Spain, 1994; State-of-

the-Art-Lecture, 25th World Congress of Psychology, Brussels, 1992; Nordic Psychophysiology Society, 1992; British Psychophysiological Society, 1979, 1990; 18th European Meeting on Psychosomatic Research, Helsinki, Finland, 1990; "Psykologstämman", Swedish Psychological Association, 1990; German Psychophysiological Society, 1989; Center for Graduate Research on Emotion and Psychopathology, Amsterdam, 1989; World Congress of Behavior Therapy, Edinburgh, U. K., 1988; British Psychological Society, 1986; Presidential Address, Society for Psychophysiological Research, 1985; Nordic Psychological Meeting, 1985; Society for Psychophysiological Research, 1978.

Numerous *Invited Conference Presentations*, e.g., Ellison Medical Foundation "Workshop on the biological assessment of mental processes – both conscious and unconscious – and their relevance to psychotherapy research", New York, 2006, "20th Workshop in Cognitive Neuropsychology, Bressanone, Italy 2002; Forum for European Neuroscience, Brighton, UK, 2000; Emotion, Qualia, and Consciousness, Ischia, Italy, 1998; NIMH Workshops on Anxiety, 1997, 1998; World Congress of Behavioural and Cognitive Therapies, Copenhagen, 1995; Memory and Brain, New York, 1995, 23rd International Congress of Applied Psychology, 1994; Electrodermal Activity: From Physiology to Psychology, Tilque, France, 1992; Work, Stress, and Human Welfare: Biopsychosocial Perspectives, Stockholm, Sweden, 1992; Attention and Information Processing in Infants and Adults, Princeton, 1990; 18th European Meeting on Psychosomatic Research, Helsinki, Finland, 1990; International Society for Research on Emotion, Paris, 1989; Search for the Causes of Schizophrenia II, Heidelberg, W. Germany, 1989; Perspectives on Aversively Motivated Behavior, Umeå, Sweden, 1987; Cognitive Science Perspective on Emotion, Motivation, and Cognition, Il Ciocco, Italy, 1987; Energetics and Human Information Processing, Les Arcs, France, 1985; EPIC VI, Chicago, U.S.A., 1981; The Orienting Reflex in Human, The Netherlands, 1978; Biofeedback and Self-Regulation, W. Germany, 1977; Evoked Potentials in man, Brussels, Belgium, 1974.

Many *invited colloquia* at American (e.g. Pennsylvania, Iowa, UCLA, University of Southern California, University of Wisconsin, Rochester, Florida, Western Psychiatric Institute-Pittsburgh, Northwestern, Chicago, Stanford, UC-Berkeley, UC-San Diego), Australian (Sydney, Macquarie, New South Wales), Asian (Hong Kong), European (e.g., Universidad de la Laguna, Tenerife, Spain; Greifswald, Jena and Tübingen, Germany; Trondheim, Norway; Helsinki, Finland), and Swedish (Lund, Gothenburg, Stockholm, Umeå) universities.

Publications

1. Öhman, A. (1971). Differentiation of conditioned and orienting response components in electrodermal conditioning. *Psychophysiology*, **8**, 7-22.
2. Öhman, A. (1971). Interaction between instruction-induced expectance and strength of unconditioned stimulus in GSR conditioning. *Journal of Experimental Psychology*, **88**, 384-390.
3. Öhman, A. (1972). Factor analytically derived components of orienting, defensive, and conditioned behavior in electrodermal conditioning. *Psychophysiology*, **9**, 199-209.
4. Öhman, A., Kaye, J.J., & Lader, M. (1972). Regular interstimulus interval as a critical determinant of short-term "habituation" of the auditory averaged evoked response. *Psychonomic Science*, **27**, 275-278.
5. Öhman, A., & Lader, M. (1972). Selective attention and "habituation" of the auditory averaged evoked response in humans. *Physiology and Behavior*, **8**, 79-85.
6. Öhman, A. (1973). Temporal generalization of electrodermal orienting responses: Comment. *Perceptual and Motor Skills*, **37**, 593-594.
7. Öhman, A., Björkstrand, P.-Å., & Ellström, P.-E. (1973). Effect of explicit trial-by-trial information about shock probability in long interstimulus interval GSR conditioning. *Journal of Experimental Psychology*, **98**, 145-151.
8. Öhman, A., & Bohlin, G. (1973). Magnitude and habituation of the orienting reaction as predictors of discriminative electrodermal conditioning. *Journal of Experimental Research in Personality*, **6**, 293-299.
9. Öhman, A., & Bohlin, G. (1973). The relationship between spontaneous and stimulus-correlated electrodermal responses in simple and discriminative conditioning paradigms. *Psychophysiology*, **10**, 589-500.
10. Öhman, A. (1974). Orienting reactions, expectancy learning, and conditioned responses in electrodermal conditioning with different interstimulus intervals. *Biological Psychology*, **1**, 189-200.
11. Öhman, A. (1974). The relationship between electrodermal and digital vasomotor responses in aversive classical conditioning. *Biological Psychology*, **2**, 17-31.
12. Öhman, A., Eriksson, A., Fredrikson, M., Hugdahl, K., & Olofsson, C. (1974). Habituation of the electrodermal orienting response to potentially phobic and supposedly neutral stimuli in normal human subjects. *Biological Psychology*, **2**, 85-93.
13. Öhman, A. (1975). Fobisk betingning: En laboratorieanalag för experimentell behandlingsforskning. (Phobic conditioning: A laboratory analogue for experimental treatment research). *Scandinavian Journal of Behaviour Therapy*, **4**, 91-106.
14. Öhman, A., Eriksson, A., & Olofsson, C. (1975). One-trial learning and superior resistance to extinction of autonomic responses conditioned to potentially phobic stimuli. *Journal of Comparative and Physiological Psychology*, **88**, 619-627. Reprinted in R. M. Tarpy & R. E. Mayer (Eds.) (1979). *Readings in learning and memory*. Glenview, Ill.: Scott, Foresman, & Co.
15. Öhman, A., Erixon, G., & Löfberg, I. (1975). Phobias and preparedness: Phobic versus neutral pictures as conditioned stimuli for human autonomic responses. *Journal of Abnormal Psychology*, **84**, 41-45. Reprinted in J. M. Neale, G. C. Davison, & K. P. Price (Eds.) (1978). *Contemporary readings in psychopathology*. 2nd ed. New York: Wiley.
16. Öhman, A., MacLean, V., & Lader, M. (1975). Concomitant short-term changes in the auditory evoked response, the EEG, and reaction-time performance in relation to the temporal parameters of stimulation. *Scandinavian Journal of Psychology*, **16**, 177-183.

17. MacLean, V., Öhman, A., & Lader, M. (1975). Effects of attention, activation, and stimulus regularity on short-term "habituation" of the auditory evoked response. *Biological Psychology*, **3**, 57-63.
18. Öhman, A. (1976). Towards experimental models of "mental disease". In S. G. R. Nordström (Ed.) Faculty of social science at Uppsala university. *Acta Universitatis Upsaliensis: Uppsala University 500 years*. Vol. 7. Uppsala: Almqvist & Wiksell, pp. 119-145.
19. Öhman, A., Ellström, P.-E., & Björkstrand, P.-Å. (1976). Subjective estimates of UCS probability and electrodermal responses in a long interstimulus interval paradigm. *Psychophysiology*, **13**, 121-127.
20. Öhman, A., Fredrikson, M., Hugdahl, K., & Rimmö, P.-A. (1976). The premise of equipotentiality in human conditioning: Conditioned electrodermal responses to potentially phobic stimuli. *Journal of Experimental Psychology: General*, **105**, 313-337.
21. Fredrikson, M., Hugdahl, K., & Öhman, A. (1976). Electrodermal conditioning to potentially phobic stimuli in male and female subjects. *Biological Psychology*, **4**, 305-314.
22. Hygge, S., & Öhman, A. (1976). Conditioned electrodermal responses through vicarious instigation and through threat to a performer. *Scandinavian Journal of Psychology*, **17**, 65-72.
23. Hygge, S., & Öhman, A. (1976). The relation of vicarious to direct instigation and conditioning of electrodermal responses. *Scandinavian Journal of Psychology*, **17**, 217-222.
24. Öhman, A., & Lader, M. (1977). Short-term changes of the human auditory evoked potential during repetitive stimulation. In J. E. Desmedt (Ed.) *Progress in Clinical Neurophysiology*, Vol 2. Basel: Karger, Pp. 91-118.
25. Öhman, A., & Hygge, S. (1977). When apple definitions become orange realities in banana theories: Epistemological and psychophysiological considerations on Lindahl's analysis of vicarious instigation research. *Scandinavian Journal of Psychology*, **18**, 92-102.
26. Berggren, T., Öhman, A., & Fredrikson, M. (1977). Locus on control and habituation of the electrodermal orienting response to nonsignal and signal stimuli. *Journal of Personality and Social Psychology*, **35**, 708-716.
27. Hugdahl, K., Fredrikson, M., & Öhman, K. (1977). "Preparedness" and "arousability" as determinants of electrodermal conditioning. *Behaviour Research and Therapy*, **15**, 345-353.
28. Hugdahl, K., & Öhman, A. (1977). Effects of instructions on acquisition and extinction of electrodermal responses to fear-relevant stimuli. *Journal of Experimental Psychology: Human Learning and Memory*, **3**, 608-618.
29. Öhman, A., Fredrikson, M., & Hugdahl, K. (1978). Orienting and defensive responding in the electrodermal system: Palmar-dorsal differences and recovery rate during conditioning to potentially phobic stimuli. *Psychophysiology*, **15**, 93-101.
30. Öhman, A., Fredrikson, M., & Hugdahl, K. (1978). Towards an experimental model of simple phobic reactions. *Behaviour Analysis and Modification*, **2**, 97-114.
31. Öhman, A., Fredrikson, M., & Hugdahl, K. (1978). Reply to S. J. Rachman: Towards an experimental model of simple phobic reactions. *Behaviour Analysis and Modification*, **2**, 240-245.
32. Öhman, A., & Dimberg, U. (1978). Facial expressions as conditioned stimuli for electrodermal responses: A case of "preparedness"? *Journal of Personality and Social Psychology*, **36**, 1251-1258.
33. Hygge, S., & Öhman, A. (1978). Modeling processes in the acquisition of fears: Vicarious electrodermal conditioning to fear-relevant stimuli. *Journal of Personality and Social Psychology*, **36**, 271-279.

34. Lang, P.J., Öhman, A., & Simons, R.F. (1978). The psychophysiology of anticipation. In J. Requin (Ed.) *Attention and performance*. Vol. VII. Hillsdale, N. J.: Erlbaum, pp. 469-485.
35. Öhman, A. (1979). Fear relevance, autonomic conditioning, and phobias: A laboratory model. In P.-O. Sjödén, S. Bates, & W. S. Dockens III (Eds.) *Trends in Behavior Therapy*, New York: Academic Press, pp. 107-133.
36. Öhman, A. (1979). The orienting response, attention, and learning: An information-processing perspective. In H. D. Kimmel, E. H. van Olst, & J. F. Orlebeke (Eds.) *The orienting reflex in humans*. Hillsdale, N. J.: Erlbaum, pp. 443-471.
37. Öhman, A. (1979). Editorial. European psychophysiology. *Psychophysiology*, **16**, 411-412.
38. Öhman, A., & Hugdahl, K. (1979). Instructional control of autonomic respondents: Fear relevance as a critical factor. In N. Birlbaumer & H. D. Kimmel (Eds.) *Biofeedback and self-regulation*. Hillsdale, N. J.: Erlbaum, pp. 149-165.
39. Öhman, A., & Ursin, H. (1979). On the sufficiency of a Pavlovian conditioning model for coping with the complexities of neurosis. *The Behavioral and Brain Science*, **2**, 179-180.
40. Fredrikson, M., & Öhman, A. (1979). Cardiovascular and electrodermal responses during conditioning to fear-relevant stimuli. *Psychophysiology*, **16**, 1-7.
41. Fredrikson, M., & Öhman, A. (1979). Heart-rate and electrodermal orienting responses to simple and complex visual stimuli. *Scandinavian Journal of Psychology*, **20**, 37-41.
42. Simons, R.F., Öhman, A., & Lang, P.J. (1979). Anticipation and response set: Cortical, cardiac, and electrodermal correlates. *Psychophysiology*, **16**, 222-233.
43. Hugdahl, K., & Öhman, A. (1980). Skin conductance conditioning to potentially phobic stimuli as a function of interstimulus interval and delay versus trace paradigm. *Psychophysiology*, **17**, 348-355.
44. Berg, G., Laberg, J.C., Skutle, A., & Öhman, A. (1981). Instructed versus pharmacological effects of alcohol in alcoholics and social drinkers. *Behaviour Research and Therapy*, **19**, 55-66.
45. Öhman, A., & Lang, P.J. (Eds.) (1981) European psychophysiology. *Psychophysiology*, **18**, 359-489.
46. Öhman, A. (1981). Electrodermal activity and vulnerability to schizophrenia: A review. *Biological Psychology*, **12**, 87-145.
47. Öhman, A. (1981). The role of experimental psychology in the scientific analysis of psychopathology. *International Journal of Psychology*, **16**, 299-321.
48. Öhman, A. (1983). The orienting response during Pavlovian conditioning. In: D. A. T. Siddle (Ed.) *Orienting and habituation: Perspectives in human research*. Chichester: Wiley, 315-369.
49. Dimberg, U., & Öhman, A. (1983). The effects of directional facial cues on electrodermal conditioning to facial stimuli. *Psychophysiology*, **20**, 160-167.
50. Öhman, A. (1983). Part VI. Evaluating evaluative conditioning: Some comments on "Cognitions, evaluations, and conditioning: Rules of sequence and rules of consequence" by Levey and Martin. *Advances in Behaviour Research and Therapy*, **4**, 213-218.
51. Alm, T., Lindström, L.H., Öst, L.-G., & Öhman, A. (1984). Electrodermal nonresponding in schizophrenia: Relationships to attentional, clinical, biochemical, computed tomographical and genetic factors. *International Journal of Psychophysiology*, **1**, 195-208.
52. Donchin, E., Heffley, E., Hillyard, S.A., Loveless, N., Maltzman, I., Öhman, A., Rösler, F., Ruchkin, D., & Siddle, D. (1984). Cognitions and event-related potentials: II. The orienting reflex and P300. *Annals of the New York Academy of Sciences*, **425**, 39-57.

53. Öhman, A., & Dimberg, U. (1984). An evolutionary perspective on human social behavior. In W. M. Waid (Ed.) *Sociophysiology*. New York: Springer, pp 47-86.
54. Öhman, A., Dimberg, U., & Öst, L.-G. (1985). Animal and social phobias: Biological constraints on learned fear responses. In S. Reiss & R. R. Bootzin (Eds.) *Theoretical issues in behavior therapy*. New York: Academic Press, pp 123-175.
55. Öhman, A. (1985). Psykologiska och biologiska faktorer i emotioner: Fobier som prototyp för en interaktionistisk analys. (Psychological and biological factors in emotions: Phobias as prototypes for an interactional analysis). In B. Törestad & L. Nystedt (Eds.) *Människoomvärld i samspel*. En bok om interaktionistisk psykologi. Stockholm: Natur och Kultur, pp. 27-47.
56. Öhman, A. (1986). Integrating energetic and information processing concepts: Emotions as keys to a functional-evolutionary perspective. In R. Hockey, A. Gaillard, & M. Coles (Eds.) *Energetics and human information processing*. Dordrecht, The Netherlands: Martinus Nijhoff.
57. Öhman, A. (1986). Face the beast and fear the face: Animal and social fears as prototypes for evolutionary analyses of emotion. *Psychophysiology*, **23**, 123-145.
58. Öhman, A. (1986). Om emotioners biologiska, inlärda och omedvetna ursprung. (On the biological, learned, and unconscious origin of emotions). In L. Sjöberg (Ed.) *Svensk psykologisk forskning av idag: Studiet av känslor, varseblivning, tänkande och personlighet*. (Contemporary Swedish Psychology: The study of emotions, perception, thinking and personality). Stockholm: Humanistisk-samhällsvetenskapliga forskningsrådet, pp. 101-113.
59. Burell, G., Sundin, Ö., Ström, G., & Öhman, A. (1986). Heart and Lifestyle: A Type A treatment program for myocardial infarction patients. *Scandinavian Journal of Behaviour Therapy*, **15**, 87-93.
60. Öhman, A., Nordby, H., & d'Elia, G. (1986). Orienting and schizophrenia: Stimulus significance, attention, and distraction in a signaled reaction time task. *Journal of Abnormal Psychology*, **95**, 326-334.
61. Öhman, A. (1987). The psychophysiology of emotion: An evolutionary-cognitive perspective. In P. K. Ackles, J. R. Jennings, & M. G. H. Coles (Eds.) *Advances in psychophysiology*, Vol. **2**, Greenwich, CT: JAI Press, pp. 79-127.
62. Öhman, A. (1987). Evolution, learning, and phobias: An interactional analysis. In D. Magnusson & A. Öhman (Eds.) *Psychopathology: An interactional perspective*. New York: Academic Press, pp 143-158.
63. Öhman, A., & Bohlin, G. (1987). Barry's unification of matter, mind, and body: One mental process for each polygraph channel. In P. K. Ackles, J. R. Jennings, & M. G. H. Coles (Eds.) *Advances in psychophysiology*, Vol. 2, Greenwich, CT: JAI Press, pp 259-270.
64. Magnusson, D., & Öhman, A. (Eds.). (1987). *Psychopathology: An interactional perspective*. New York: Academic Press.
65. Öhman, A., & Magnusson, D. (1987). An interactional paradigm for research on psychopathology. In D. Magnusson & A. Öhman (Eds.) *Psychopathology: An interactional perspective*. New York: Academic Press, pp. 3-21.
66. Hugdahl, K., & Öhman, A. (1987). The history of psychology in Sweden. In A. R. Gilgen & C. K. Gilgen (Eds.) *International handbook of psychology*. Westport, CT: Greenwood Press, pp 461-483.
67. Svebak, S., Nordby, H., & Öhman, A. (1987). The personality of the cardiac responder: Interaction of seriousmindedness and Type A behavior. *Biological Psychology*, **25**, 1-9.
68. Thoresen, C.E., & Öhman, A. (1987). The Type A behavior pattern: A person-environment interaction perspective. In D. Magnusson & A. Öhman (Eds.) *Psychopathology: An interactional perspective*. New York: Academic Press, pp 325-346.

69. Öhman, A. (1988). Preattentive processes in the generation of emotions. In V. Hamilton, G. H. Bower, & N. H. Frijda (Eds.). *Cognitive perspectives on emotion and motivation*. Dordrecht, The Netherlands: Martinus Nijhoff Publishers, pp 127-144.
70. Öhman, A. (1988). Nonconscious control of autonomic responses: A role for Pavlovian conditioning? *Biological Psychology*, **27**, 113-135.
71. Öhman, A. & Bohlin, G. (1989). The role of controllability in cardiovascular activation and cardiovascular disease: Help or hindrance? In A. Steptoe & A. Appels (Eds.) *Stress, personal control and health*. Chichester, Wiley, pp. 257-276.
72. Öhman, A., Dimberg, U., & Esteves, F. (1989). Preattentive activation of aversive emotions. In T. Archer & L.-G. Nilsson (Eds.). *Aversion, avoidance, and anxiety: Perspectives on aversively motivated behavior*. Hillsdale, N.J.: Lawrence Erlbaum Associates, pp. 169-193.
73. Öhman, A., Nordby, H., & Svebak, S. (1989). Components of Type A behavior and patterns of task-induced cardiovascular activation. *Psychophysiology*, **26**, 81-88.
74. Öhman, A., Nordby, H., & d'Elia, G. (1989). Orienting in schizophrenia: Habituation to auditory stimuli of constant and varying intensity. *Psychophysiology*, **26**, 48-61.
75. Öhman, A. Öhlund, L., Alm, T., Wieselgren, I.-M., Öst, L.-G. & Lindström, L. (1989). Electrodermal nonresponding, premorbid adjustment, and symptomatology as predictors of long-term social functioning in schizophrenia. *Journal of Abnormal Psychology*, **98**, 426-435.
76. Öhman, A. (1990). Brain function in schizophrenia: Discussion. In H. Häfner & W. F. Gattaz (Eds.) *Search for the causes of schizophrenia II*. Berlin-Heidelberg: Springer-Verlag, pp. 361-369.
77. Öhlund, L., Öhman, A., Alm, T., Öst, L.-G., & Lindström, L. (1990). Season of Birth and Electrodermal Nonresponding in Male Schizophrenics. *Biological Psychiatry*, **27**, 328-340.
78. Straube, E.R., & Öhman, A. (1990). Functional role of the different autonomic nervous system activity patterns found in schizophrenia - A new model. In E. Straube & K. Hahlweg (Eds.) *Schizophrenia: Concepts vulnerability and intervention*. Berlin: Springer, pp. 135-157.
79. Fredrikson, M., Klein, K., & Öhman, A. (1990). Do instructions modify effects of beta-adrenergic blockade on anxiety? *Psychophysiology*, **27**, 309-317.
80. Öhman, A. (1991). Brott och rädska. Om rädslands psykologi (Crime and fear. On the psychology of fear). In G. Wiklund (Ed.) *Rädslan för brott*. BRÅ-rapport 1991:2. Stockholm: Brottsförebyggande rådet, pp.41-50.
81. Öhman, A., & Hugdahl, K. (1991). Psicofisiologia dell'emozione: prospettive evoluzionistiche, apprendimento emozionale e modelli di risposte fisiologiche. (The psychophysiology of emotion: Evolutionary perspectives, emotional learning, and physiological response patterns) In L. Stegagno (Ed.) *Psicofisiologia. 2: Correlati fisiologici dei processi cognitivi e del comportamento*. Torino, Italy: Editore Boringhieri.
82. Öhman, A., & Sundin, Ö. (1991). Stress, type A-atferd och afterdsmedisinsk behandling: Rehabilitering etter hjerteinfarkt (In Norwegian). (Stress, Type A behavior, and behavioral medicine treatment: Rehabilitation following myocardial infarction). *Discriminant*, **18**, 26-36.
83. Öhman, A., & Öhngren, B. (Eds.) (1991). *Two faces of Swedish psychology. I. Frontiers in perception and cognition*. An evaluation of Swedish research in cognitive psychology. Uppsala: Swedish Science Press.
84. Öhlund, L. S., Öhman, A., Öst, L.-G. Lindström, L. H., & Wieselgren, I.-M. (1991). Electrodermal orienting response, maternal age, and season of birth in schizophrenia. *Psychiatry Research*, **36**, 223-232.

85. Öhman, A. (1992). Orienting and attention: Preferred preattentive processing of potentially phobic stimuli. In B. A. Campbell, R. Richardson, & H. Haynes (Eds.) *Attention and information processing in infants and adults: Perspectives from human and animal research*. Hillsdale, N. J.: Erlbaum, pp. 263-295.
86. Öhman, A. (1992). For distinguished contribution to psychophysiology: Peter J. Lang. *Psychophysiology*, **29**, 1-7.
87. Öhman, A. (1992). The history of biological psychology in Sweden: The human side. In B. Everitt, H. Ursin, P. Venables, & L. Weiskrantz. *Two faces of Swedish psychology: 2. Frontiers in Biological Psychology*. An evaluation of Swedish research in biological psychology. Uppsala: Swedish Science Press.
88. Öhman, A., Burell, G., Ramund, B., & Fleischman, N. (1992). Decomposing coronary-prone behavior: Dimensions of Type A behavior in the Videotaped structured interview. *Journal of Psychopathology and Behavioral Assessment*, **14**, 21-54.
89. Öhman, A., & Sundin, Ö. (1992). Typ A beteende som nyckel till vidmakthållande av livsstilsförändringar hos infarktpatienter. (Type A behavior as a key to maintaining life style changes in myocardial infarction patients). In J. Liesspers & Å. Nygren (Eds.) *Ny livsstil på livstid - om vidmakthållande av livsstilsförändringar*. Stockholm: Folksam. pp. 76-104.
90. Lindström, E. M., Öhlund, L. S., Lindström, L. H., & Öhman, A. (1992). Symptomatology and electrodermal activity as predictors of neuroleptic response in young male schizophrenics. *Psychiatry Research*, **42**, 145-158.
91. Öhlund, L. S., Lindström, L. H., & Öhman, A. (1992). Electrodermal orienting response and central nervous system dopamine and serotonin activity in schizophrenics. *Journal of Nervous and Mental Disease*, **180**, 304-313.
92. Palm, T., & Öhman, A. (1992). Social interaction, cardiovascular activation and the Type A behavior pattern. *International Journal of Psychophysiology*, **13**, 101-110.
93. Sundin, Ö., & Öhman, A. (1992). Cardiovascular reactivity and the Type A behavior pattern. *Journal of Psychophysiology*, **6**, 240-251.
94. Öhman, A. (1993). Fear and anxiety as emotional phenomena: Clinical phenomenology, evolutionary perspectives, and information processing mechanisms. In M. Lewis & J. M. Haviland (Eds.) *Handbook of emotions*. New York: Guilford.
95. Öhman, A. (1993). Stimulus prepotency and fear learning: Data and theory. In N. Birbaumer & A. Öhman (Eds.) *The organization of emotion: Cognitive, clinical and psychophysiological aspects*, pp. 218-239 Toronto: Hogrefe and Huber.
96. Öhman, A., & Birbaumer, N. (1993). Psychophysiological and cognitive-clinical perspectives on emotion: Introduction and overview. In N. Birbaumer, & A. Öhman, (Eds.) (in press) *The organization of emotion: Cognitive, clinical and psychophysiological aspects*, pp. 3-17. Toronto: Hogrefe and Huber.
97. Öhman, A., Esteves, F., Flykt, A., & Soares, J. J. F. (1993). Gateways to consciousness: Emotion, attention, and electrodermal activity. In J.-C. Roy, W. Boucsein, D. Fowles & J. Gruzelier (Eds.) *Progress in electrodermal research*. New York Plenum.
98. Öhman, A., & Soares, J. J. F. (1993). On the automaticity of phobic fear: Conditioned electrodermal responses to masked fear-relevant stimuli. *Journal of Abnormal Psychology*, **102**, 121-132.
99. Birbaumer, N., & Öhman, A. (Eds.) (1993) *The organization of emotion: Cognitive, clinical and psychophysiological aspects*. Toronto: Hogrefe and Huber.
100. Brandberg, M., & Öhman, A. (1993). Type A behavior and real-life situations: A case study of interactions. *Scandinavian Journal of Behaviour Therapy*, **22**, 31-48.

101. Esteves, F., & Öhman, A. (1993). Masking the face: Recognition of emotional facial expressions as a function of the parameters of backward masking. *Scandinavian Journal of Psychology*, **34**, 1-18.
102. Soares, J. J. F., & Öhman, A. (1993). Backward masking and skin conductance responses after conditioning to non-feared but fear-relevant stimuli in fearful subjects. *Psychophysiology*, **30**, 460-466.
103. Soares, J. J. F., & Öhman, A. (1993). Preattentive processing, preparedness, and phobias: Effects of instruction on conditioned electrodermal responses to masked and non-masked fear-relevant stimuli. *Behaviour Research and Therapy*, **31**, 87-95.
104. Öhman, A. (1994). The psychophysiology of emotion: Evolutionary and nonconscious origins. In G. d'Ydewalle, P. Eelen, & P. Bertelsen (Eds.). *International perspectives on psychological science. Vol. 1: The state of the art.* (pp. 197-226). Hillsdale, NJ: Erlbaum.
105. Öhman, A. (1994). *Rädsla, ångest, fobi.* (Fear, anxiety, phobia). Lund: Scandinavian University Press.
106. Öhman, A. (1994). Vetenskap, människosyn och beteendepåverkan. (Science, views of human nature, and behavior modification). In L. Lundgren & U. Svedin (Eds). *Livsstil och miljö.* Lund: BTJ Tryck
107. Öhman, A., & Soares, J. J. F. (1994). "Unconscious anxiety": Phobic responses to masked stimuli. *Journal of Abnormal Psychology*, **103**, 231-240.
108. Burell, G., Öhman, A., Sundin, Ö., Ström, G. Ramund, B., Cullhed, I., & Thoresen, C.E. (1994) Modification of Type A behavior in post myocardial infarction patients: A route to cardiac rehabilitation. *International Journal of Behavioral Medicine*, **1**, 32-54.
109. Esteves, F., Dimberg, U., & Öhman, A. (1994). Automatically elicited fear: Conditioned skin conductance responses to masked facial expressions. *Cognition and Emotion*, **8**, 393-413.
110. Esteves, F., Dimberg, U., Parra, C., & Öhman, A. (1994). Nonconscious associative learning: Pavlovian conditioning of skin conductance responses to masked fear-relevant facial stimuli. *Psychophysiology*, **31**, 375-385.
111. Sundin, Ö., & Öhman, A., Burell, G., Palm. T., & Ström, G. (1994). Psychophysiological effects of Type A modification in myocardial infarction patients. *International Journal of Behavioral Medicine*, **1**, 55-75.
112. Wieselgren, I.-M., Öhlund, L. S., Lindström, L. H., & Öhman, A. (1994). Electrodermal activity as a predictor of long-term social functioning in female schizophrenics. *Journal of Abnormal Psychology*, **103**, 570-575.
113. Öhman, A. (1995). Eggs in more than one basket: Mediating mechanisms between evolution and phobias. *Behavioral and Brain Sciences*, **18**, 310-311.
114. Öhman, A., Esteves, F., & Parra, C. (1995). Estrategias de investigación en psicopatología: Una perspectiva vulnerabilidad-estrés. (Strategies for research in psychopathology: A vulnerability-stress perspective) In V. E. Caballa, G. Buela-Casal, y J. A. Carrobles (dirs.) *Manual de psicopatología y trastornos psiquátricos, Vol. I: Fundamentos conceptuales; trastornos por ansiedad, afectivos y psicóticos.* Madrid: Sieglo XXI de Espana Editores, pp. 163-204.
115. Öhman, A., Esteves, F., & Soares, J. J. F. (1995). Preparedness and preattentive associative learning: Electrodermal conditioning to masked stimuli. *Journal of Psychophysiology*, **9**, 99-108.
116. Öhman, A., Ehinger, B., Hagenfeldt, K., Jacobsson, L., Järvholt, B., Matell, R., Nerbrand, C., Svartengren, M., & Wahlberg, J. (1995). Inga bevis för elkänslighet av elektromagnetiska fält. Patientens upplevelse måste ändå respekteras! *Läkartidningen*, **92**, 2227-2228.

117. Öhman, A., & Sundin, Ö. (1995). Emotional factors in cardiovascular disorder. *Current Opinions in Psychiatry*, **8**, 410-413.
118. Sundin, Ö., Öhman, A., Palm, T., & Ström, G. (1995). Cardiovascular reactivity, Type A behavior and coronary heart disease: Comparisons between myocardial infarction patients and controls during laboratory induced stress. *Psychophysiology*, **32**, 28-35.
119. Öhman, A. (1996). Preferential preattentive processing of threat in anxiety: Preparedness and attentional biases. In R. M. Rapee (Ed.) *Current controversies in the anxiety disorders*. New York: Guilford Press.
120. Öhman, A. (1996). Outcome and mechanisms in the evolution of phobias: Surprise, latent inhibition, and the status of the preparedness hypothesis. In R. M. Rapee (Ed.) *Current controversies in the anxiety disorders*. New York: Guilford Press.
121. Öhman, A. (1996). Beteendemedicinska modeller (A behavioral medicine model). I "Kropp och själ. Psykosomatik i praktisk sjukvård". *Svensk Medicin*, **51**, 62-71.
122. Öhman, A. (1996). The nature of emotion: Fundamental questions. P. Ekman & R. J. Davidson (Eds.) (Invited Review). *Biological Psychology*, **44**, 62-65.
123. Dimberg, U., & Öhman, A. (1996). Behold the wrath: Psychophysiological responses to facial stimuli. *Motivation and Emotion*, **20**, 149-182.
124. Hultman, C. M., Öhman, A., Öhlund, L. S., Wieselgren, I.-M., Lindström, L. H., & Öst, L.-G. (1996). Electrodermal activity and social network as predictors of outcome of episodes in schizophrenia. *Journal of Abnormal Psychology*, **105**, 626-636.
125. Liesspers, J., & Öhman, A. (1996). Livsstilsförändringar på livstid: En "beteendefokuserad" modell för eftervård vid kranskärlssjukdom (Life style change for a life-time: A behaviorally focused model for rehabilitation after coronary disease). *Läkartidningen*, **93** (15), 1453-1458.
126. Liesspers, J., Öhman, A. & Nygren, Å. (1996). Rehabilitering och sekundärprevention vid kranskärlssjukdom. Praktisk tillämpning och preliminära erfarenheter av en "beteendefokuserad" modell. (Rehabilitation and secondary prevention in coronary disease. Application and preliminary data of a behaviorally focused model). *Socialmedicinsk tidskrift*, **73** (4), 191-196.
127. Öhman, A. (1997). As fast as the blink of an eye: Preattentive Processing and Evolutionary Facilitation of Attention. In P. J. Lang, M. Balaban, & R. F. Simons (Eds.) *Attention and motivation: Cognitive Perspectives from Psychophysiology, Reflexology, and Neuroscience*. Hillsdale, NJ: Erlbaum
128. Öhman, A. (1997). On the edge of consciousness: Preattentive mechanisms in the generation of anxiety. In R. Fuller, P. Walsh, & P. McGinley (Eds.) *A century of psychology: Progress, paradigms, and prospects for the new millennium*. London: Routledge.
129. Öhman, A. (1997). Unconscious preattentive mechanisms in the activation of phobic fear. In G. C. L. Davey (Ed.) *Phobias: A handbook of description, treatment, and theory*. Chichester, UK: Wiley, pp. 349-374.
130. Hultman, C., Öhman, A., Cnattingius, S., Wieselgren, I.-M., & Lindström, L. H. (1997). Reduced optimality and prenatal and neonatal risk factors for schizophrenia. *British Journal of Psychiatry*, **170**, 128-133.
131. Hultman, C. M., Wieselgren, I.-M., & Öhman, A. (1997). Relationships between social support, social coping, and life events in the relapse of schizophrenic patients. *Scandinavian Journal of Psychology*, **38**, 2-12.
132. Parra, C., Esteves, F., Flykt, A., & Öhman, A. (1997). Pavlovian conditioning to social stimuli: Backward masking and the dissociation of implicit and explicit cognitive processes. *European Psychologist*, **2**, 106-117.

133. Öhman, A. (1998). Ingmar Dureman: The founder of clinical and physiological psychology in Uppsala. In G. Jansson (Ed.). *Four pioneers of psychology at Uppsala University*. Department of Psychology, Uppsala University., pp. 45-57.
134. Öhman, A., & Hultman, C. (1998). Electrodermal activity and obstetric complications in schizophrenia. *Journal of Abnormal Psychology*, **107**, 228-237.
135. Öhman, A., & Soares, J. J. F. (1998). Emotional conditioning to masked stimuli: Expectancies for aversive outcomes following non-recognized fear-relevant stimuli. *Journal of Experimental Psychology: General*, **127**, 69-82.
136. Hultman, C. M., & Öhman, A. (1998). Perinatal characteristics and schizophrenia: Electrodermal activity as a mediating link in a vulnerability-stress perspective. *International Journal of Developmental Neuroscience*, **16**, 307-315.
137. Lisspers, J., Hofman-Bang, C., Nordlander, R., Sunding, Ö., Nygren, Å., Öhman, A., & Rydén, L. (1998). Multifactorial evaluation of a program for lifestyle behavior change in rehabilitation and secondary prevention of coronary artery disease. *Scandinavian Cardiovascular Journal*, **33**, 9-16.
138. Morris, J. S., Öhman, A., & Dolan, R. J. (1998). Conscious and unconscious emotional learning in the human amygdala. *Nature*, **393**, 467-470.
139. Öhman, A. (1999). Distinguishing unconscious from conscious emotional processes: Methodological considerations and theoretical implications. In T. Dalgleish & M. Power (Eds.) *Handbook of cognition and emotion*. Chichester: Wiley, pp. 321-352.
140. Öhman, A. (1999). Contributing to confusion rather than to knowledge: A commentary on Mayer et al. *Journal of Psychophysiology*, **13**, 160-162
141. Globisch, J., Hamm, A., Esteves, F., & Öhman, A. (1999). Fear appears fast: temporal course of startle reflex potentiation in animal fearful subjects. *Psychophysiology*, **36**, 66-75.
142. Hofman-Bang, C., Lisspers, J., Nordlander, R., Nygren, Å., Sundin, Ö., Öhman, A., & Rydén, L. (1999). Two-year results of a controlled study of a residential rehabilitation for patients treated with percutaneous transluminal coronary angioplasty. A randomized study of a multifactorial programme. *European Heart Journal*, **20**, 1465-1474.
143. Lisspers, J., Sundin, Ö., Hofman-Bang, C., Nordlander, R., Nygren, Å., Rydén, L., & Öhman, A. (1999). Behavioural effects of a comprehensive, multifactorial program for lifestyle change after Percutaneous Transillumininal Coronary Angioplasty: A prospective randomised controlled study. *Journal of Psychosomatic Research*, **46**, 143-154.
144. Lundqvist, D., Esteves, F., & Öhman, A. (1999) The face of wrath: Critical features for conveying facial threat. *Cognition and Emotion*, **13**, 691-711.
145. Morris, J. S., Öhman, A., & Dolan, R. J. (1999) A subcortical pathway to the right amygdala mediating "unseen" fear. *Proceedings of the National Academy of Science*, **96**, 1680-1685.
146. Öhman, A. (2000). La biologie des phobies. *Pour la Science*, no. 271 (Mai), 50-57.
147. Öhman, A. (2000). Anxiety. In G. Fink (Ed.) *Encyclopedia of stress*. Vol. 1. San Diego, CA: Academic Press. Pp. 226-231.
148. Öhman, A. (2000). Fear. In G. Fink (Ed.) *Encyclopedia of stress*. Vol. 2. San Diego, CA: Academic Press. Pp. 111-116.
149. Öhman, A. (2000) Fear and anxiety: Clinical, evolutionary, and cognitive perspectives. In M. Lewis & J. M. Haviland (Eds.) *Handbook of emotions*. 2nd ed. New York: Guilford, Pp 573-593.
150. Öhman, A., Flykt, A., & Lundqvist, D. (2000). Unconscious emotion: Evolutionary perspectives, psychophysiological data, and neuropsychological mechanisms. In R. Lane & L. Nadel (Eds.) *The cognitive neuroscience of emotion*. New York: Oxford University

- Press. Pp. 296-327.
151. Öhman, A., Hamm, A., & Hugdahl, K. (2000). Cognition and the autonomic nervous system: Orienting, anticipation, and conditioning. In J. Cacioppo, L. Tassinary, & G. G. Berntson (Eds.) *Handbook of Psychophysiology*. New York. Cambridge University Press, pp. 533-575.
 152. Bildt, C., Alfredsson, L., Michélsen, H., Punnett, L., Vingård, E., Torgén, M., Öhman, A., & Kilbom, Å. (2000). Occupational and nonoccupational risk indicators for incident and chronic low back pain in a sample of the Swedish general population during a 4-year period: An influence of depression? *International Journal of Behavioral Medicine*, **7**, 372-392.
 153. Lang, P.J., Davis, M., & Ohman, A. (2000). Fear and anxiety: animal models and human cognitive psychophysiology. *Journal of Affective Disorders*, **61**, 137 - 159.
 154. Öhman, A. (2001). Förflykt och rädsla: neurala mekanismer för omedveten aktivering av emotioner. I H. Lagercrantz (ed.) *Hjärnan och medv etandet* (Reason and fright: Neural mechanisms for the nonconscious activation of emotion). Nora, Sweden: Nya Doxa, Pp. 124-143.
 155. Öhman, A., Flykt, A., & Esteves, F. (2001). Emotion drives attention: Detecting the snake in the grass. *Journal of Experimental Psychology: General*, **130**, 466-478.
 156. Öhman, A., Lundqvist, D., & Esteves, F. (2001). The face in the crowd revisited: A threat advantage with schematic stimuli. *Journal of Personality and Social Psychology*, **80**, 381-396.
 157. Öhman, A., & Mineka, S. (2001). Fear, phobias and preparedness: Toward an evolved module of fear and fear learning. *Psychological Review*, **108**, 483-522. [Reprinted in D. Shanks (Ed.) *Psychology of Learning*. (Vol. 1-4). London: SAGE Publications, 2008].
 158. Katkin, E. S., Wiens, S., & Öhman, A. (2001) Nonconscious fear conditioning and heart beat detection. *Psychological Science*, **12**, 366-370.
 159. Scott, B., Brandberg, M., & Öhman, A. (2001). Measuring the negative mood component of stress experiences: Description and psychometric properties of a short adjective checklist of stress responses. *Scandinavian Journal of Psychology*, **42**, 1-8.
 160. Öhman, A., & Wiens, S. (2001). To think and to feel: Nonconscious emotional activation and consciousness. In A. Kaszniak (Ed.). *Emotions, Qualia, and Consciousness*. World Scientific, Singapore, pp. 363-385.
 161. Öhman, A. (2002). Automaticity and the amygdala: Nonconscious responses to emotional faces. *Current Directions in Psychological Science*, **11**, 62-66. Reprinted in J. B. Ruscher & E. Y. Hammer (Eds.) *Current directions in social psychology* (pp. 41-47). Upper Saddle River, NJ: Pearson/Prentice Hall
 162. Mineka, S., & Öhman, A. (2002). Born to fear: Non-associative vs associative factors in the etiology of phobias. *Behaviour Research and Therapy*, **40**, 173-184.
 163. Mineka, S., & Öhman, A. (2002). Phobias and preparedness: The selective, automatic, and encapsulated nature of fear. *Biological Psychiatry*, **52**, 927-937.
 164. Wiens, S., & Öhman, A. (2002). Unawareness is more than a chance event: Comment on Lovibond and Shanks (2002). *Journal of Experimental Psychology: Animal Behavior Processes*, **28**, 27-31.
 165. Öhman, A., & Mineka, S. (2003). The malicious serpent: Snakes as a prototypical stimulus for an evolved module of fear. *Current Directions in Psychological Science*, **12**, 2-9. Reprinted in T. F. Oltmanns & R. E. Emery (Eds.) *Current directions in abnormal psychology* (pp. 62-68). Upper Saddle River, NJ: Pearson/Prentice Hall
 166. Öhman, A., & Wiens, S. (2003). On the automaticity of autonomic responses in emotion: An evolutionary perspective. In R. J. Davidson, K. Scherer & H. H. Hill (Eds.) *Handbook of affective sciences*. New York: Oxford University Press, pp. 256-275.

167. Sundin, Ö., Lisspers, J., Hofman-Bang, C., Öhman, A. & Rydén, L. (2003). Comparing Multi-factorial Lifestyle Interventions and Stress-management in Coronary Risk Reduction. *International Journal of Behavior Medicine*, **10**, 191-204.
168. Helling, I., Öhman, A., & Hultman, C. (2003). School achievements and schizophrenia: A case-control study. *Acta Psychiatrica Scandinavica*, **108**, 381-386.
169. Wiens, S., Katkin, E. S., & Öhman, A. (2003). Effects of trial order and differential conditioning on acquisition of differential shock expectancy and skin conductance conditioning to masked stimuli. *Psychophysiology*, **40**, 989-997.
170. Lundqvist, D., Esteves, F., & Öhman, A. (2004). The Face of wrath: The role of features and configurations in conveying facial threat. *Cognition and Emotion*. **18**, 161-182.
171. Öhman, A., & Wiens, S. (2004). The concept of an evolved fear module and cognitive theories of anxiety. In Manstead, A., Fischer, A., & Frijda, N. (Eds.). *Feeling and emotion. The Amsterdam Symposium*. New York: Cambridge University Press.
172. Critchley, H. D., Wiens, S., Rothstein, P., Öhman, A., & Dolan, R. J. (2004). Neural systems supporting interoceptive awareness: Evidence from functional and structural magnetic resonance imaging. *Nature Neuroscience*, **7**, 189-195.
173. Schupp, H. T., Öhman, A., Junghöfer, M., Weike, A. I., Stockburger, J., & Hamm, A. O. (2004). The facilitated processing of threatening faces: An ERP analysis. *Emotion*, **4**, 189-200.
174. Wiens, S., Fransson, P., Dietrich, T., Lohmann, P., Ingvar, M., & Öhman, A. (2004). Keeping it short: A comparison of methods for brief picture presentation. *Psychological Science*, **15**, 282-285.
175. Carlsson, K., Petersson, K. M., Lundqvist, D., Karlsson, A., Ingvar, M., & Öhman, A. (2004). Fear and the amygdala: Manipulation of awareness generates differential cerebral responses to phobic and fear-relevant (but non-feared) stimuli. *Emotion*, **4**, 340-353.
176. Öhman, A. (2005). Conditioned fear of a face: A prelude to ethnic enmity? *Science*, **309** (29 July), 711-712.
177. Öhman, A. (2005). The role of the amygdala in human fear: Automatic detection of threat. *Psychoneuroendocrinology*, **30**, 952-958.
178. Juth, P., Lundqvist, D., Karlsson, A., & Öhman, A. (2005). Looking for foes and friends: Perceptual and emotional factors when finding a face in the crowd. *Emotion*, **5**, 379-395.
179. Lisspers, J., Sundin, Ö., Hofman-Bang, C., Rydén, L., Öhman, A. & Nygren, Å. (2005). Long-term effects of lifestyle behavior change in coronary artery disease: Effects on recurrent coronary events after percutaneous coronary intervention (PCI). *Health Psychology*, **24**, 41-48.
180. Lundqvist, D., & Öhman, A. (2005). Emotion regulates attention: The relation between facial configuration, facial emotion, and visual attention. *Visual Cognition*, **12**, 51-84.
181. Lundqvist, D., & Öhman, A. (2005). Caught by the evil eye: Nonconscious information processing, emotion, and attention to facial stimuli. In L. Feldman-Barrett, P. Winkielman, & P. Niedenthal (Eds.) *Emotion: Conscious and Unconscious* (pp. 97-122). New York Guilford.
182. Wiens, S., & Öhman, A. (2005). Visual masking in magnetic resonance imaging. *NeuroImage*, **27**, 465-467.
183. Öhman, A. (2006). Automatic processes in emotion: Capture of attention and emotion activation. In Q. Jing, H. Zhang, & K. Zhang (Eds.) *Progress in Psychology Science Around the World: Volume 1*. UK: Psychology Press, pp. 297-313.
184. Öhman, A. (2006). Making sense of emotion: evolution, reason & the brain. *Daedalus*, **135** (3), 33-45

185. Carlsson, K., Andersson, J., Petrovic, P., Petersson, K. M., Öhman, A., & Ingvar, M. (2006). Predictability modulates the affective and sensory-discriminative neural processing of pain. *NeuroImage*, **32**, 1804-1814.
186. Flykt A, Esteves F, Öhman A. (2007). Skin conductance responses to masked conditioned stimuli: Phylogenetic/ontogenetic factors versus direction of threat? *Biological psychology*, **74** (3), 328-336.
187. Öhman, A., Carlsson, K., Lundqvist, D. & Ingvar. M. (2007). Neural Mechanisms of Fear: The Central Role of the Amygdala. *Physiology and Behavior*, **92**, 180-185.
188. Öhman, A. (2007). Has evolution primed humans to “beware the beast”? *Proceedings of the National Academy of Sciences of the U.S.A.*, **104**, 16396-16397.
189. Öhman, A. (2007). Anxiety. In G. Fink (Ed.) *Encyclopedia of stress*. Vol. 1. 2nd ed. Oxford: Elsevier,
190. Öhman, A. (2007). Fear. In G. Fink (Ed.) *Encyclopedia of stress*. Vo2. 1. 2nd ed. Oxford: Elsevier.
191. Öhman, A. (2007). Emotioner. In L. Olsson m fl. (Eds.) *Hjärnan*. Stockholm: Karolinska Institutet University Press, pp. 131-146.
192. Öhman, A., & Rück, C. (2007). Four principles of fear and their implications for phobias. In J. Rottenberg & S. Johnson (Eds.) *Emotion and psychopathology: Bridging affective and clinical science*. Washington, DC, APA Books, pp. 167-190.
193. Wiens, S., & Öhman, A. (2007). Probing unconscious emotional processes: On becoming a successful masketeer. In J. A. Coan & J. J. B. Allen (Eds.) *Handbook of emotion elicitation and assessment*. New York: Oxford University Press, pp. 65-90.
194. Öhman, A. (2008). Fear and anxiety: Overlaps and dissociations. In M. Lewis & J. M. Haviland-Jones (Eds.) *Handbooks of emotions* (3rd ed.). New York: Guilford, pp 709-729.
195. Wiens, S., Peira, N., Golkar, A., & Öhman, A. (2008). Recognizing masked threat: Fear betrays but disgust you can trust. *Emotion*, **8**, 810-819
196. Öhman, A. (2009). Fear. In D. Sander & K. R. Scherer (Eds.) *Oxford Companion of Affective Sciences*. Oxford: Oxford University Press, pp. 182-183.
197. Öhman, A. (2009). Human fear conditioning and the amygdala. In P. J. Whalen & E. A. Phelps (Eds.). *The Human Amygdala*. New York: Guilford Press.
198. Öhman, A. (2009). Of snakes and faces: An evolutionary perspective on the psychology of fear. *Scandinavian Journal of Psychology*, **50**, 543-552
199. Öhman A (2009) Phobia and Human Evolution. In: Squire L. R. (ed.) *Encyclopedia of Neuroscience, volume 7*, pp. 633-638. Oxford: Academic Press
200. Öhman, A. (2009). Post-Traumatic Fear Memories: Analyzing a Case-Study of a Sexual Assault. In Lars Bäckman & Lars Nyberg (Eds.) *Memory, aging, and the brain: A festschrift in honour of Lars-Göran Nilsson*. Hove, UK: Psychology Press pp. 211-228).
201. Öhman, A., & Rück, C. (2009). Ångestsyndrom (Anxiety syndromes). In J. Herlofson, E. Ekselius, L. G. Lundh, A. Lundin, B- Mårtensson, & M. Åsberg (Eds.). *Psykiatri (Psychiatry)*. Lund, Sweden: Studentlitteratur, pp. 335-359.
202. Heilig, M., Ingvar, M., & Öhman, A. (2009). Neurovetenskap (Neuroscience). In J. Herlofson, E. Ekselius, L. G. Lundh, A. Lundin, B- Mårtensson, & M. Åsberg (Eds.). *Psykiatri (Psychiatry)*. Lund, Sweden: Studentlitteratur, pp. 55-65.
203. Kompus K, Hugdahl K, Öhman A, Marklund, P., & Nyberg, L. (2009). Distinct control networks for cognition and emotion in the prefrontal cortex *Neuroscience Letters*, **467**(2), 76-80

204. Lonsdorf, T. B., Weike, A. I., Nikamo, P., Schalling, M., Hamm, A. O., and Öhman, A. (2009). Genetic Gating of Human Fear Learning and Extinction: Implications for Gene-Environment Interaction in Anxiety Disorder. *Psychological Science*, **20**(2), 198-206
205. Lonsdorf, T.B., Rück, C., Bergström, J., Andersson, G., Öhman, A., Schalling, M., & Lindefors, N. (2009) The symptomatic profile of panic disorder is shaped by the 5-HTTLPR polymorphism *Progress in Neuro-Psychopharmacology & Biological Psychiatry Volume*, **33**, 1479-1483.
206. Maurex, L., Zaboli, G., Wiens, S., Åsberg, M., Leopardi, R., and Öhman, A. (2009). Emotionally controlled decision-making and a gene variant related to serotonin synthesis in women with borderline personality disorder. *Scandinavian Journal of Psychology*, **50**, 5-10.
207. Nilsonne, Å., & Öhman, A. (2009). Psykiatri – det evolutionära perspektivet (Psychiatry – the evolutionary perspective). In J. Herlofson, E. Ekselius, L. G. Lundh, A. Lundin, B-Mårtensson, & M. Åsberg (Eds.). *Psykiatri* (Psychiatry). Lund, Sweden: Studentlitteratur, pp. 83-89.
208. Olsson, A., & Öhman, A. (2009). Is cultivating “biological blindness” a viable route to understanding behavioral phenomena? *Behavioral and Brain Sciences*, **32**, 220-221.
209. Olsson, A., & Öhman, A. (2009) The affective neuroscience of emotion: Automatic activation, interoception, and emotion regulation. In G. Berntson & J. Cacioppo (Eds.) *Handbook of Neuroscience for the Behavioral Sciences*. Vol. 2. New York: Wiley, pp. 731-744.
210. Soares, S. C., Esteves, F., Lundqvist, D., & Öhman, A. (2009). Some animals specific fears are more specific than others: Evidence from attention and emotion measures. *Behavioural Research and Therapy*, **47**, 1032-1042
211. Lonsdorf, T. B., Weike, A. I., Golkar, A., Schalling, M., Hamm, A. O., & Öhman, A. (2010). Amygdala-dependent fear conditioning in humans is modulated by the BDNFval66met polymorphism. *Behavioral Neuroscience*, **124**(1), 9-15213.
212. Lonsdorf, T.B., Rück, C., Bergström, J., Andersson, G., Öhman, A., Lindefors, N. & Schalling, M., (2010). The COMTval158met polymorphism is associated with symptom relief during exposure-based cognitive-behavioral treatment in panic disorder. *BMC Psychiatry*, 1099. Available at <http://www.biomedcentral.com/1471-244X/10/99>
213. Öhman, A., Juth, P., & Lundqvist, D. (2010). Finding the face in the crowd: The anger superiority effect requires a male target in a familiar crowd. *Cognition and Emotion*, **24**, 1216-1228.
214. Maurex L, Lekander M, Nilsonne Å, Andersson E E, Åsberg M, Öhman A. (2010). Social problem solving, autobiographical memory, trauma and depression in women with borderline personality disorder and a history of suicide attempts. *British Journal of Clinical Psychology*, **49**, 327-342.
215. Maurex L, Zaboli G, Leopardi R, Åsberg M, Öhman A. (2010). The serotonin transporter gene polymorphism (5-HTTLPR) and affective symptoms among women diagnosed with borderline personality disorder. *European Psychiatry*, **25**(1), 19-25.
216. Victor, T. A., Furey, M.L., Fromm, S.J., Öhman, A., & Drevets, W. C. (2010). Relationship between amygdala responses to masked faces and mood state, and treatment in major depressive disorder. *Archives of General Psychiatry*, **67**, 1228-1238.
217. Golkar,A. Lonsdorf,T. B., Olsson, A., Lindstrom, K. M., Fransson, P., Schalling, M., Ingvar, M. & Öhman, A. (2010).Distinct contributions of the dorsolateral prefrontal and orbitofrontal cortex during emotion regulation. *Neuroimage*, in revision

218. Lonsdorf, T.B., Golkar, A., Lindström, K.M., Fransson, P., Öhman, A. & Ingvar, M.
The 5-HTTLPR and COMTval158met genotypes independently gate amygdala activity
during passive viewing of angry faces. *Submitted for publication*