#### CURRICULUM VITAE

## May 2005

#### 1. **PERSONAL BACKGROUND**

NAME: Michael A. Persinger

DEPARTMENT: Psychology

PRINCIPAL SUBJECT TAUGHT: Neuroscience/Methodology

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# 2. **HISTORY AT LAURENTIAN**

Date of Appointment: 1971

Rank when Appointed: Assistant Professor

Date of Tenure: 1974
Date of Promotions:
Associate Professor: 1975

Full Professor: 1980

Coordinator: Behavioral Neuroscience Program: 1983-present

Cross-Appointed to Department of Biology 1990-present

Adjunct Professor: University of Ottawa (Psychology), 1990-2000

Adjunct Professor: University of Western Ontario (Medical Biophysics), 1999-2001

Adjunct Professor: University of Guelph (Zoology), 2000-present

## 3. **ACADEMIC BACKGROUND**

# a) <u>Degree granted/Discipline/Year/Institution/Name</u>

B.A. 1967, University of Wisconsin, Madison, Wisconsin, U.S.A.
M.A. 1969, University of Tennessee, Knoxville, Tennessee, U.S.A.
Ph.D. 1971, University of Manitoba, Winnipeg, Manitoba, Canada

# b) Ph.D. Thesis Title

Pre- and neonatal exposure to cobalt 60 or 0.5 Hz electromagnetic fields and delayed

conditioned approach behavior.

# 3.1 <u>Laboratory Research Background</u>

#### 1981-Present

- -Quantitative electroencephalographic measurements and models of consciousness
- \*Biophysics of the histomorphological, behavioral, and (brain) molecular consequences of a single impact (200 g dropped from 0.9 m) of mechanical energy to the skull: simulation of "mild" brain injury in humans
- -Bioelectromagnetism: Mechanisms and processes
- -Identification of brain damage patterns (in the rat) induced by a single subcutaneous injection of lithium and pilocarpine and postictal pharmacological treatments
- -Evaluation of behavioral and immunological deficits associated with insidious, limbic seizure-induced brain damage
- -Verification of Tectonic Strain Hypothesis within several tectonostratigraphic regions
- -Factor analyses and construct validity of a temporal lobe lability factor in the human population (applications to creativity and inferential processing during crises)
- -Verification and determination of the contribution of geomagnetic activity and experimentally-induced pulsed magnetic fields to brain function and anomalous experiences
- -Memory modifications by altered states
- -Neuropsychological correlates of religious and delusional thinking
- -Comparisons of qualitative (neurological) and quantitative (neuropsychological) techniques for assessing diffuse/microstructural brain damage

### 1977-1980

- -Specification of conditioned taste aversion mechanisms
- -Experimental manipulation of brain mast cell numbers and their degranulation profiles (re: multiple sclerosis)
- -Quantitative models for luminosity (UFO report) predictions (adjunct forecasting of earthquakes)
- -Haematological, histological, and physiological consequences of sudden reinforcement schedules: application to lifestyle alterations
- -Effects of magnetic field application upon memory processes

# 1973-1976

- -Taurine effects on behaviour, physiology, and brain chemistry
- -Development of histological techniques for analyses of brain, hypophysis, thyroid, spleen, and thymus
- -Identification and quantification of mast cells in the rat brain
- -Matrix and profile analyses of behavioral, physiological, histological, and biochemical correlates
- -Multiple regression analyses of space-time coordinates of luminosity reports

#### 1966-1972

-Study of rat cardiovascular and haematological function during magnetic field exposure

- -Statistical analyses of human disease conditions and their correlates with meteorological conditions
- -Behavioral and biological consequences of prenatal exposure to X-rays and gamma-rays
- -Pursuit of the thyroidal mechanism as the source of rotating magnetic field-induced changes in the rodent
- -Amino acid production in abiogenic environments simulating the pre-Cambrian condition

## 3.2 Clinical Research and Practice

#### 1995-Present

- -Transcerebral (weak magnetic field) stimulation for treatment of depression and pain following mild to moderate brain injury
- -Development of integrated, accurate neuropsychological, cognitive and personality assessments: test-retest and construct validity
- -Geomagnetic activity, complex partial epileptic-like experiences and PSI phenomena
- -Hypnotic susceptibility, memory modifications by therapies and the simulation of these therapies by weak, complex transcerebral magnetic fields

#### 1985-1994

- -Discriminative analyses of cerebral functional differences in populations of normal, braininjured and epileptic children and adults
- -Development of psychometric instruments to discern the focus of electrical lability within the brain as determined by phenomenological content
- -Determination of the interaction between personality factors and mild temporal lobe symptoms

## **1972-1988 (intermittent)**

- -Thanatology (death confrontation: behavioral patterns of volunteers with terminal or highly probable terminal conditions)
- -Reinforcement histories and daily rituals of young adults prone to sudden religious and occult conversions

# Clinical Practice (Registered Psychologist): Certificate Number: 1952 1986-Present - Canadian Register of Health Providers Number: 05079

- -Clinical Neuropsychology & Psychology. Special emphasis & expertise for: epilepsy, learning problems, & closed head injuries. Assessment involves an integrated measurement of classic & novel neuropsychological procedures, personality profiles, cognitive level & electrocortical patterns. Family psychometric measures are often integrated
- -Intervention: Anomalous/Extreme paranormal crises
- -Counselling Survivors of Head Injuries and Temporal Lobe Epilepsy, i.e., partial complex epilepsy (Post-traumatic Stress Disorders)

## 4. **TEACHING EXPERIENCE**

# a) <u>University Teaching Experience</u>

- 1971-75 Assistant Professor of Psychology, Laurentian University (Full-time)
- 1975-80 Associate Professor of Psychology, Laurentian University (Full-time)
- 1980- Full Professor of Psychology, Laurentian University (Full-time)
- 1983- Coordinator, Behavioral Neuroscience Program, Laurentian University (Full-time)
- b) Research Experience: 34 years; Laurentian University; Full-time

#### 5. **LEAVES**

- a) <u>Study Leave</u>: N/A
- b) <u>Sabbatical Leaves</u>: 1978-79/1986 (half)

## 6. **ADMINISTRATIVE CONTRIBUTION TO LAURENTIAN**

1975-2000: Chairman of University Animal Care Committee

1971-present: Member of Departmental Budget, Personnel or Academic Affairs

1975-78: Chairman of Departmental Budget Committee

1988-2001: Centre in Mining and Mineral Exploration Research (CIMMER)

1983-present: Coordinator of Behavioral Neuroscience Program

# 7. SCHOLARLY ACTIVITY/ACADEMIC PUBLICATIONS

## a) <u>Books</u>:

- Persinger, M.A. (Ed.). <u>ELF and VLF Electromagnetic Field Effects</u>. New York: Plenum Press, 1974.
- Persinger, M.A. (Ed.). <u>The Paranormal. Part I: Patterns</u>. New York: M.S.S. Information, 1974.
- Persinger, M.A. (Ed.). <u>The Paranormal. Part II: Mechanisms and Models</u>. New York: M.S.S. Information, 1974.
- Persinger, M.A., & Lafrenière, G.F. Space-time Transients and Unusual Events. Chicago: Nelson-Hall, 1977.
- Persinger, M.A., Carrey, N.J., & Suess, L. <u>TM and Cult-Mania</u>. Boston: Christopher Publishing House, 1980.
- Persinger, M.A. The Weather Matrix and Human Behavior. New York: Praeger, 1980.

- Persinger, M.A. Neuropsychological Bases of God Beliefs. New York: Praeger, 1987.
- b) <u>Books Edited</u> (see above)
- c) Chapters in Academic Books:
- Persinger, M.A. Introduction. In M.A. Persinger (Ed.). <u>ELF and VLF Electromagnetic</u> <u>Field Effects</u>. New York: Plenum Press, 1974, Pp. 1-8.
- Persinger, M.A. ELF and VLF electromagnetic and magnetic field effects: the patterns and the problems. In M.A. Persinger (Ed.). <u>ELF and VLF Electromagnetic Field Effects</u>. New York: Plenum Press, 1974, Pp. 275-310.
- Persinger, M.A., Lafrenière, G.F., & Ossenkopp, K.-P. Behaviourial, physiological, and histological changes in rats exposed during developmental stages to ELF magnetic fields. In M.A. Persinger (Ed.), <u>ELF and VLF Electromagnetic Field Effects</u>. New York: Plenum Press, 1974, pp. 177-225.
- Persinger, M.A. Effects of magnetic fields on animal behaviour. In H.D. Johnson (Ed.), <u>Progress in Biometeorology: Division B. Progress in Animal Biometeorology</u>. Amsterdam: Swets and Zeitlinger, 1976, Pp. 177-182.
- Persinger, M.A. Limitations of human verbal behaviour in context of UFO-related stimuli. In R.F. Haines (Ed.), <u>UFO Phenomena and the Behavioral Scientist</u>. Metuchen, NJ: Scarecrow, 1979.
- Persinger, M.A. Recent studies (since 1973) on the biological effects of low and extremely low frequency electromagnetic fields. In S.W. Tromp (Ed.), <u>Biometeorological Survey</u>. Vol. 1, 1973-1974. London: Heyden, 1979, Pp. 68-73.
- Persinger, M.A. Possible infrequent geophysical sources of close UFO encounters: expected physical and behavioral-biological effects. In R.F. Haines (Ed.), <u>UFO Phenomena and the Behavioral Scientist</u>. Metuchen, N.J.: Scarecrow Press, 1979, Pp. 396-434.
- Persinger, M.A. The effects of transient or intense geomagnetic or related global perturbation upon human group behavior. In J.B. Calhoun (Ed.), <u>Perspectives on Adaptation</u>, <u>Environment and Population</u>. New York: Praeger, 1983, Pp. 28-30.
- Persinger, M.A. <u>The Modern Magnetotherapies</u>. In A.A. Marino (Ed.), <u>Handbook of Bioelectricity</u>, New York: Marcel-Dekker, 1988, pp. 589-627.
- Persinger, M.A. Near death experiences: determining the neuroanatomical pathways by experiential patterns and simulation in experimental settings. In L. Bessette (Ed). Healing: Beyond Suffering or Death, MHH: Quebec, 1993, pp. 227-286.

- Persinger, M.A. Hypnosis and the brain: the relationship between subclinical complex partial epileptic-like symptoms, imagination, suggestibility and changes in self-identity. In R. G. Kunzendorff, N.P. Spanos, and B. Wallace (Eds). <u>Hypnosis and Imagination</u>. New York: Baywood Publications, 1996, pp. 283-305.
- Persinger, M.A. Near-death experiences and ecstasy: An artifact of the organization of the human brain? In S. Della Salla (Ed.), Mind Myths. John Wiley, NY: 1999, pp. 85-99.
- Persinger, M. A. The UFO experience: A normal correlate of human brain function. In D.M. Jacobs (Ed.), <u>UFOs and abductions: Challenging the borders of knowledge</u>. University Press of Kansas: Lawrence. 2000, pp. 262-302.
- Persinger, M. A., & Koren, S. A. Predicting the characteristics of haunts from geomagnetic factors and brain sensitivity: Evidence from field and experimental studies. In J. Houran & R. Lange (Eds), <u>Hauntings and poltergeists: Multidisciplinary perspectives</u>. Jefferson, NC: McFarland & Company, 2001, pp. 179-194.
- Roll, W.G., & Persinger, M.A. Poltergeists and hauntings. In J. Houran & R. Lange (Eds.), <u>Hauntings and poltergeists: Multidisciplinary perspectives</u>. Jefferson, NC: McFarland & Company, 2001, pp. 123-163.
- Persinger, M. A. Experimental simulation of the god experience: implications for religious beliefs and the future of the human species. In R. Joseph (ed). <u>Neurotheology:</u>
  <u>Brain, Science, Spirituality, Religious Experience</u>. San Jose CA: University Press, pp. 267-284
- Persinger, M.A. Neurobehavioral effects of brief exposures to weak intensity, complex magnetic fields within experimental and clinical settings. In M. J. McLean, S. Engstrom, & R. R. Holocomb (Eds). <u>Magnetotherapy: potential therapeutic benefits and adverse effects</u>. New York: TFG Press, 2003, pp. 89-118.
- Persinger, M.A., & Derr, J.S. Luminous shapes with unusual motions as potential predictors of earthquakes. In C.M. Rodrigue & E. Rovi (Eds.), <u>Earthquake hazards</u>, in press.

## d) Articles (in refereed journals):

- Persinger, M.A. Open-field behaviors in rats exposed pre-natally to a low intensity-low frequency, rotating magnetic field. <u>Developmental Psychobiology</u>, 1969, <u>2</u>(3), 168-171.
- Persinger, M.A., & Foster, W.S. ELF rotating magnetic fields: prenatal exposure and adult behavior. Archives fur Meteorologie Geophysiks und Bioklimatologie, Series B, 1970, 18, 363-369.
- Persinger, M.A. Prenatal exposure to an ELF rotating magnetic field, ambulatory behavior

- and lunar distance at birth: a correlation. Psychological Reports, 1971, 28, 435-438.
- Persinger, M.A., & Pear, J.J. Prenatal exposure to an ELF-rotating magnetic field and subsequent increase in conditioned suppression. <u>Developmental Psychobiology</u>, 1972, <u>5</u>(3), 269-274.
- Persinger, M.A., Ossenkopp, K.-P., & Glavin, G.B. Behavioral changes in adult rats exposed to ELF magnetic fields. <u>International Journal of Biometeorology</u>, 1972, <u>16</u>, 163-162.
- Persinger, M.A., Glavin, G.B., & Ossenkopp, K.-P. Physiological changes in adult rats exposed to an ELF rotating magnetic field. <u>International Journal of Biometeorology</u>, 1972, 16(2), 163-172.
- Ossenkopp, K.-P., Koltek, T.W., & Persinger, M.A. Prenatal exposure to an extremely low frequency- low intensity rotating magnetic field and increases in thyroid and testicle weights in rats. <a href="Developmental Psychobiology">Developmental Psychobiology</a>, 1972, <a href="5">5</a>(3), 275-285.
- Pear, J.J., Moody, J.E., & Persinger, M.A. Lever attacking by rats during free-operant avoidance. <u>Journal of the Experimental Analysis of Behavior</u>, 1972, <u>18</u>, 517-523.
- Persinger, M.A., & Ossenkopp, K.-P. Some behavioral effects of pre- and neo-natal exposure to an ELF rotating magnetic field. <u>International Journal of Biometeorology</u>, 1973, 17, 217-220.
- Possible cardiac driving by an external rotating magnetic field. <u>International Journal of Biometeorology</u>, 1973, <u>17(3)</u>, 263-266.
- Ludwig, W., Persinger, M.A., & Ossenkopp, K.-P. Physiological effects of electromagnetic fields in the ELF region. <u>Archives fur Meteorologie</u>, Geophysiks und <u>Bioklimatologie</u>, Series B, 1973, <u>21</u>, 110-116.
- Persinger, M.A., Ludwig, H.W., & Ossenkopp, K.-P. Psychophysiological effects of extremely low frequency electromagnetic fields: a review. <u>Perceptual and Motor Skills</u>, 1973, 36, 1131-1159.
- Ludwig, W., Persinger, M.A., & Ossenkopp, K.-P. Physiologische wirkung electromagnetischer wellen bei-tiefen frequenzen. <u>Archives fur Meteorologie</u>, <u>Geophysiks und Bioklimatologie</u>, Series B, 1973, <u>21</u>, 99-109.
- Persinger, M.A., Ossenkopp, K.-P., Kamaya, V., & Pear, J.J. Physiological changes associated with changing fixed ratio schedules in rats. <u>Psychological Reports</u>, 1974, 35, 847-850.
- Persinger, M.A. Geophysical models for parapsychological experiences.

- Psychoenergetic Systems, 1975, 1, 63-74.
- Persinger, M.A. Lag responses in mood reports to changes in the weather matrix. <u>International Journal of Biometeorology</u>, 1975, 19(2), 108-144.
- Persinger, M.A., Lafrenière, G.F., & Mainprize, D.N. Human reaction time variability changes from low intensity 3-Hz and 10-Hz electric fields: Interactions with stimulus pattern, sex and field intensity. <u>International Journal of Biometeorology</u>, 1975, 19(1), 56-64.
- Persinger, M.A. Day-time wheel running activity in laboratory rats following geomagnetic event of 5-6 July, 1974. <u>International Journal of Biometeorology</u>, 1976, <u>20</u>(1), 19-22.
- Persinger, M.A. Transient geophysical bases for ostensible UFO-related phenomena and associated verbal behavior? <u>Perceptual and Motor Skills</u>, 1976, 43, 215-221.
- Persinger, M.A. The problems of human verbal behaviour: The final reference for measuring ostensible PSI phenomena. <u>The Journal of Research in PSI Phenomena</u>, 1976, <u>1</u>(1), 72-90.
- Persinger, M.A., & Robb, N.I. Cajal-retzius cells as electro-static guides for migrating neurons. <u>Psychological Reports</u>, 1976, <u>39</u>, 651-655.
- Persinger, M.A., Valliant, P.M., & Falter, H. Weak inhibitory behavioral effects of postnatal-preweaning taurine injections in rats. <u>Developmental Psychobiology</u>, 1976, 9(2), 131-136.
- Ehrmann, W., Leitner, H., Ludwig, W., Persinger, M.A., & Thomas, R. Therapie mit ELF-magnetfeldern. Zeitschrift fur Physikalische Medizin, 1976, 5, 161-170.
- Persinger, M.A., Lafrenière, G.F., & Falter, H. Oral taurine effects on inhibitory behavior: response transients to step-like schedule changes. <u>Psychopharmacology</u>, 1976, <u>49</u>, 249-252.
- Persinger, M.A. A force/delta D and delta T concept applied to paranormal events: general comments. The Journal of Research on PSI Phenomena, 1976, 1, 1-8.
- Persinger, M.A. Mast cells in the brain: possibilities for physiological psychology. <u>Physiological Psychology</u>, 1977, <u>5</u>(2), 166-176.
- Persinger, M.A. Preweaning body marking reduces brain mast cell numbers in rats. Behavioral Biology, 1977, 21, 426-431.
- Persinger, M.A., Lafrenière, G.F., & Carrey, N.J. Thyroid morphology and wet organ weight changes in rats exposed to different low intensity 0.5 Hz magnetic fields and

- pre-experimental caging conditions. <u>International Journal of Biometeorology</u>, 1978, <u>22</u>(1), 67-73.
- Persinger, M.A., & Coderre, D. Thymus mast cell numbers following perinatal and adult exposures to low intensity 0.5 Hz magnetic fields. <u>International Journal of Biometeorology</u>, 1978, 22(2), 123-128.
- Persinger, M.A., Cooke, W.J., & Janes, J.T. No evidence for relationship between biorhythms and industrial accidents. <u>Perceptual and Motor Skills</u>, 1978, <u>46</u>, 423-426.
- Persinger, M.A., Lafrenière, G.F., Carrey, N.J., & Mazzuchin, A. Thirty-eight blood, tissue and consumptive measures from rats exposed perinatally and as adults to 0.5 Hz magnetic fields. <u>International Journal of Biometeorology</u>, 1978, <u>22</u>(3), 213-226.
- Lundgren, J., & Persinger, M.A. Activity and acquisition/extinction comparisons of brown- and white-coated litter mates. <u>Psychological Reports</u>, 1978, <u>43</u>, 779-782.
- Persinger, M.A., Carrey, N.J., Lafrenière, G.F., & Mazzuchin, A. Step-like DRL schedule change effects on blood chemistry, leukocytes, and tissue in rats. <u>Physiology and Behavior</u>, 1978, <u>21</u>, 899-904.
- Persinger, M.A., & Fiss, T.B. Mesenteric mast cell degranulation is not essential for conditioned taste aversion. <u>Pharmacology, Biochemistry and Behavior</u>, 1978, <u>9</u>, 725-730.
- Persinger, M.A. Brain mast cell numbers in the albino rat: sources of variability. Behavioral and Neural Biology, 1979, 25, 380-386.
- Persinger, M.A. ELF field mediation in spontaneous PSI events: direct information transfer or conditioned elicitation? <u>Psychoenergetic Systems</u>, 1979, <u>3</u>, 155-169.
- Valliant, P.M., Persinger, M.A., & Satinder, K.P. Long-term effects of preweaning taurine injections in rats: Interactions with strain and gender. <u>Developmental Psychobiology</u>, 1979, 12, 515-518.
- Krema, R., Persinger, M.A., & Sartor, V. Thyroid and thymus morphology in rats following sudden DRL reinforcement schedule changes. <u>Physiology and Behavior</u>, 1979, <u>23</u>, 1163-1164.
- Persinger, M.A. Behaviouristic descriptions of paranormal behaviors. <u>Psychoenergetic Systems</u>, 1979, <u>3</u>, 229-242.
- Lafrenière, G.F., & Persinger, M.A. Thyroid morphology and activity does not respond to ELF electromagnetic field exposures. Experientia, 1979, 35, 561-567.

- Persinger, M.A. Prediction on Fortean event reports from population and earthquake numbers. <u>Pursuit</u>, 1979, <u>12</u>(4), 162-174.
- Persinger, M.A. A first order approximation of satiation time: (IRT)<sup>2</sup>/R<sub>t</sub>. Perceptual and Motor Skills, 1979, 49, 649-650.
- Persinger, M.A. Earthquake activity and antecedent UFO report numbers. <u>Perceptual and Motor Skills</u>, 1980, <u>50</u>, 791-797.
- Rapundalo, S.T., Persinger, M.A., & Alikhan, M.A. Cardiohistological changes in rats from single episodes of maintained forced exercise. <u>Physiology and Behavior</u>, 1980, <u>25</u>, 433-438.
- Persinger, M.A. Handling factors not body marking influence thalamic mast cell numbers in the preweaned albino rat. <u>Behavioral and Neural Biology</u>, 1980, <u>30</u>, 448-459.
- Persinger, M.A. Developmental alterations in mast cell numbers and distributions within the thalamus of the albino rat. <u>Developmental Neuroscience</u>, 1981, <u>4</u>, 220-224.
- Persinger, M.A. Geophysical variables and behavior: III. Prediction of UFO reports by geomagnetic and seismic activity. <u>Perceptual and Motor Skills</u>, 1981, <u>53</u>, 115-122.
- Persinger, M.A. Geophysical variables and behavior: IV. UFO reports and fortean phenomena: temporal correlations in the central U.S.A. <u>Perceptual and Motor Skills</u>, 1982, <u>54</u>, 299-302.
- Nowak, G.P., Persinger, M.A., & Dewson, M.R. Lever pressing in expanding or collapsing intervals of nonresponse-contingent reward: sensitivity to pretraining. <u>Psychological Reports</u>, 1982, <u>50</u>, 1228-1230.
- Persinger, M.A., & Lundgren, J. Wild-albino hybrids and albino rats: thyroid weight but not muricide differences. <u>Psychological Reports</u>, 1982, <u>50</u>, 421-422.
- Schaefer, D., & Persinger, M.A. Finger prints and personality scores. <u>Perceptual and Motor Skills</u>, 1982, <u>54</u>, 1021-1022.
- McLean, K., Parker, G.H., & Persinger, M.A. Lead in the water supply alters swimming-maze behavior in adult mice. <u>Perceptual and Motor Skills</u>, 1982, <u>55</u>, 507-512.
- Kowalski, S., Parker, G.H., & Persinger, M.A. Interactions of 2-ppm lead in the water supply with food deprivation upon maze-swimming behavior of mice. <u>Perceptual and Motor Skills</u>, 1982, 55, 515-519.
- Persinger, M.A., Lepage, P., Simard, J.-P., & Parker, G.H. Mast cell numbers in incisional

- wounds in rat skin as a function of distance, time and treatment. <u>British Journal of Dermatology</u>, 1983, <u>108</u>, 179-187.
- Persinger, M.A. Geophysical variables and behavior. VII. Prediction of recent European UFO report years by nineteenth century luminosity and solar-seismic measures. Perceptual and Motor Skills, 1983, 56, 91-95.
- Persinger, M.A. Geophysical variables and behavior. VIII: Specific prediction of UFO reports within the New Madrid states by solar-geomagnetic and seismic measures. <u>Perceptual and Motor Skills</u>, 1983, <u>56</u>, 243-249.
- Persinger, M.A. Geophysical variables and behavior. IX: Expected clinical consequences of close proximity to UFO-related luminosities. <u>Perceptual and Motor Skills</u>, 1983, 56, 259-265.
- Persinger, M.A. The tectonic strain theory of luminosities (UFO reports). <u>Pursuit</u>, 1983, 16(1), 21-35.
- Mantle, E., & Persinger, M.A. Alterations in subjective evaluations during acute exposures to 5-Hz but not 9-Hz magnetic field devices. <u>Journal of Bioelectricity</u>, 1983, <u>2</u>(1), 5-14.
- Persinger, M.A. Degranulation of brain mast cells in young albino rats. <u>Behavioral and Neural Biology</u>, 1983, <u>39</u>, 299-306.
- Persinger, M.A. Winter blahs and spring irritability: the chronic but subtle behavioral operations. <u>Perceptual and Motor Skills</u>, 1983, <u>57</u>, 496-498.
- Cameron, K.A., & Persinger, M.A. Pensioners who die soon after retirement can be discriminated from survivors by post-retirement activities. <u>Psychological Reports</u>, 1983, <u>53</u>, 564-566.
- Persinger, M.A., & Levesque, B.F. Geophysical variables and behavior: XII. The weather matrix accommodates large portions of variance of measured daily mood. <u>Perceptual and Motor Skills</u>, 1983, <u>57</u>, 868-870.
- Persinger, M.A. Religious and mystical experiences as artifacts of temporal lobe function: a general hypothesis. <u>Perceptual and Motor Skills</u>, 1983, <u>57</u>, 1255-1262.
- Persinger, M.A. Geophysical variables and human behavior: XV. Tectonic strain luminosities (UFO reports) as predictable but hidden events within pre-1947 Central U.S.A. Perceptual and Motor Skills, 1983, 57, 1227-1234.
- Persinger, M.A. Striking EEG profiles from single episodes of glossolalia and transcendental meditation. <u>Perceptual and Motor Skills</u>, 1984, <u>58</u>, 127-133.

- Persinger, M.A. Prediction of historical and contemporary luminosity (UFO) reports by seismic variables within western Europe. <u>Experientia</u>, 1984, <u>40</u>, 676-681.
- Persinger, M.A. & Derr, J.S. Geophysical variables and behavior: XIX. Strong temporal relationships between inclusive seismic measures and UFO reports within Washington State. <u>Perceptual and Motor Skills</u>, 1984, <u>59</u>, 551-566.
- Persinger, M.A. People who report religious experiences may also display enhanced temporal-lobe signs. <u>Perceptual and Motor Skills</u>, 1984, <u>58</u>, 963-975.
- Persinger, M.A. Propensity to report paranormal experiences is correlated with temporal lobe signs. <u>Perceptual and Motor Skills</u>, 1984, <u>59</u>, 583-586.
- Persinger, M.A. Geophysical variables and human behavior: XVIII. Expected perceptual characteristics and local distributions of close UFO reports. <u>Perceptual and Motor Skills</u>, 1984, <u>58</u>, 951-959.
- Persinger, M.A., & Nolan, M. Geophysical variables and behavior: XX. Weekly numbers of mining accidents and the weather matrix: The importance of geomagnetic variation and barometric pressure. <u>Perceptual and Motor Skills</u>, 1984, <u>59</u>, 719-722.
- Persinger, M.A. Geophysical variables and behavior: XXI. Geomagnetic variation as possible enhancement stimuli for UFO reports preceding earthtremors. <u>Perceptual and Motor Skills</u>, 1985, 60, 37-78.
- Persinger, M.A. Geophysical variables and behavior: XXII. The tectonogenic strain continuum of unusual events. <u>Perceptual and Motor Skills</u>, 1985, <u>60</u>, 59-65.
- Persinger, M.A., & Derr, J.S. Geophysical variables and behavior: XXIII. Relations between UFO reports within the Uinta Basin and local seismicity. <u>Perceptual and Motor Skills</u>, 1985, 60, 143-152.
- Michaud, L.Y., & Persinger, M.A. Geophysical variables and behavior: XXV. Alterations in memory for a narrative following application of theta frequency electromagnetic fields. Perceptual and Motor Skills, 1985, 60, 416-418.
- Makarec, K., & Persinger, M.A. Temporal lobe signs: Electroencephalographic validity and enhanced scores in special populations. <u>Perceptual and Motor Skills</u>, 1985, <u>60</u>, 831-842.
- Persinger, M.A. Death anxiety as a semantic conditioned suppression paradigm. <u>Perceptual and Motor Skills</u>, 1985, 60, 827-830.
- Schaut, G.B., & Persinger, M.A. Subjective telepathic experiences, geomagnetic activity

- and the ELF hypothesis: Part I. Data analyses. PSI Research, 1985, 4(1), 4-20.
- Persinger, M.A. Geophysical variables and human behavior: XXX. Intense paranormal experiences occur during days of quiet, global, geomagnetic activity. <u>Perceptual and Motor Skills</u>, 1985, 61, 320-322.
- Persinger, M.A., & Valliant, P.M. Temporal lobe signs and reports of subjective paranormal experiences in a normal population: a replication. <u>Perceptual and Motor Skills</u>, 1985, 60, 903-909.
- Persinger, M.A., & Derr, J.S. Geophysical variables and behavior: XXXII. Evaluations of UFO reports in an area of infrequent seismicity: the Carman, Manitoba Episode. Perceptual and Motor Skills, 1985, 61, 807-813.
- Persinger, M.A. Subjective telepathic experiences, geomagnetic activity and the ELF hypothesis: Part II. Stimulus features and neural detection. <u>PSI Research</u>, 1985, <u>4(2)</u>, 4-23.
- Persinger, M.A., & Nolan, M. Partial amnesia for a narrative following application of theta frequency electromagnetic fields? <u>Journal of Bioelectricity</u>, 1985, <u>4</u>(2), 481-494.
- Persinger, M.A. Classical psychophysics and ELF magnetic field detection. <u>Journal of Bioelectricity</u>, 1985, <u>4</u>(2), 577-584.
- Persinger, M.A., & DeSano, C.F. Temporal lobe signs: positive correlations with imaginings and hypnosis induction profiles. <u>Psychological Reports</u>, 1986, <u>58</u>, 347-350.
- Gearhart, L., & Persinger, M.A. Geophysical variables and behavior: XXXIII. Onsets of historical and contemporary poltergeist episodes occurred with sudden increases in geomagnetic activity. <u>Perceptual and Motor Skills</u>, 1986, 62, 463-466.
- Mattsson, D., & Persinger, M.A. Geophysical variables and behavior: XXXV. Positive correlations between numbers of UFO reports and earthquake activity in Sweden. <u>Perceptual and Motor Skills</u>, 1986, 63, 921-922.
- Derr, J.S., & Persinger, M.A. Luminous phenomena and earthquakes in southern Washington. Experientia, 1986, 42, 991-999.
- Persinger, M.A., & Cameron, R.A. Are earth faults at fault in some poltergeist-like episodes? <u>Journal of the American Society for Psychical Research</u>, 1986, <u>80</u>, 49-73.
- Persinger, M.A., & Makarec, K. Temporal lobe signs and correlative behaviors displayed by normal populations. <u>Journal of General Psychology</u>, 1986, <u>114</u>(2), 179-195.

- Persinger, M.A. Geopsychology and geopsychopathology: mental processes and disorders associated with geochemical and geophysical factors. <u>Experientia</u>, 1987, 43, 92-104.
- Persinger, M.A. Human biometeorology: Mental processes and disorders: A neurobehavioral perspective. <u>Experientia</u>, 1987, <u>43</u>, 39-47.
- Persinger, M.A. Spontaneous telepathic experiences from <u>Phantasms of the Living</u> and low global geomagnetic activity. <u>Journal of the American Society for Psychical Research</u>, 1987, <u>81</u>, 23-36.
- Makarec, K., & Persinger, M.A. Electroencephalographic correlates of temporal lobe signs and imaginings. <u>Perceptual and Motor Skills</u>, 1987, <u>64</u>, 1124-1126.
- Sabourin, L., & Persinger, M.A. Specific temporal-lobe signs and enhanced delayed cross-modal matching performance. <u>Perceptual and Motor Skills</u>, 1987, <u>64</u>, 309-310.
- Persinger, M.A. MMPI profiles of normal people who display frequent temporal-lobe signs. <u>Perceptual and Motor Skills</u>, 1987, 64, 1112-1114.
- DeSano, C.F., & Persinger, M.A. Geophysical variables and behavior: XXXIX. Alterations in imaginings and suggestibility during brief magnetic field exposures. <u>Perceptual and Motor Skills</u>, 1987, 64, 968-970.
- Ross, J., & Persinger, M.A. Positive correlations between temporal lobe signs and hypnosis induction profiles: a replication. <u>Perceptual and Motor Skills</u>, 1987, <u>64</u>, 828-830.
- Makarec, K., & Persinger, M.A. Geophysical variables and behavior: XLIII. Negative correlation between accuracy of card-guessing and geomagnetic activity: A case study. Perceptual and Motor Skills, 1987, 65, 105-106.
- Lewicki, D.R., Schaut, G.H., & Persinger, M.A. Geophysical variables and behavior: XLIV. Days of subjective precognitive experiences and the days before the actual events display correlated geomagnetic activity. <u>Perceptual and Motor Skills</u>, 1987, 65, 173-174.
- Persinger, M.A. & Makarec, K. Possible learned detection of exogenous brain frequency electromagnetic fields: A case study. <u>Perceptual and Motor Skills</u>, 1987, <u>65</u>, 444-446.
- Persinger, M.A. Temporal lobe signs and personality characteristics. <u>Perceptual and Motor Skills</u>, 1988, <u>66</u>, 49-50.
- Persinger, M.A., & Schaut, G.B. Geomagnetic factors in subjective telepathic,

- precognitive and postmortem experiences. <u>Journal of the American Society for Psychical Research</u>, 1988, <u>82</u>, 217-235.
- Persinger, M.A., Makarec, K., & Bradley, J.-C. Characteristics of limbic seizures evoked by peripheral injections of lithium and pilocarpine <u>Physiology and Behavior</u>, 1988, 44, 27-37.
- Venugopal, M., & Persinger, M.A. Conditioned taste aversion is reduced in rats with a history of lithium/pilocarpine-induced limbic seizures. <u>Neuroscience Letters</u>, 1988, 90, 177-180.
- Persinger, M.A. Geophysical variables and behavior: L. Indications of a tectonic strain factor in the Rutledge (UFO) observations during 1973 in Southeastern Missouri. <u>Perceptual and Motor Skills</u>, 1988, 67, 571-575.
- Arango, M.A., & Persinger, M.A. Geophysical variables and behavior: LII. Decreased geomagnetic activity and spontaneous telepathic experiences from the Sidgwick collection. <u>Perceptual and Motor Skills</u>, 1988, <u>67</u>, 907-910.
- Persinger, M.A. Geophysical variables and behavior: LIII. Epidemiological considerations for incidence of cancer and depression in areas of frequent UFO reports. Perceptual and Motor Skills, 1988, 67, 799-803.
- Persinger, M.A. Increased geomagnetic activity and the occurrence of bereavement hallucinations: Evidence for melatonin-mediated microseizuring in the temporal lobe? <u>Neuroscience Letters</u>, 1988, <u>88</u>, 271-274.
- Derr, J.S., & Persinger, M.A. Geophysical variables and behavior: LIV. Zeitoun (Egypt) apparitions of the Virgin Mary as tectonic strain-induced luminosities. <u>Perceptual and Motor Skills</u>, 1989, <u>68</u>, 123-128.
- Persinger, M.A. Geophysical variables and behavior: LV. Predicting the details of visitor experiences and the personality of experients: The temporal lobe factor. Perceptual and Motor Skills, 1989, 68, 55-65.
- Ruttan, L.A., & Persinger, M.A. Temporal lobe signs and enhanced pleasantness scores for words generated during spontaneous narratives. <u>Perceptual and Motor Skills</u>, 1989, 69, 1101-1102.
- Persinger, M.A., & Krippner, S. Dream ESP experiments and geomagnetic activity. <u>Journal of the American Society for Psychical Research</u>, 1989, <u>83</u>, 101-116.
- Persinger, M.A. Modern neuroscience and near-death experiences: expectancies and implications. <u>Journal of Near-Death Studies</u>, 1989, <u>7</u>(4), 233-239.

- Blomme, C.G., Parker, G.H., & Persinger, M.A. Operant detection of extremely low frequency magnetic fields by the domestic pigeon *Columbia livia*. <u>Bird Behavior</u>, 1990, <u>8</u>, 73-78.
- Persinger, M.A. The tectonic strain theory as an explanation for UFO phenomena: A non-technical review of the research, 1970-1990. <u>Journal of UFO Studies</u>, 1990, <u>2</u>, 105-137.
- Persinger, M.A., & Makarec, K. University females are more fearful and males are more egotistic: possible implications for vocational pursuits and response to crisis. <u>Perceptual and Motor Skills</u>, 1990, 70, 1297-1298.
- Harrigan, T., Peredery, O., & Persinger, M.A. Failure to acquire an inhibitory task following seizure-induced brain damage. <u>Perceptual and Motor Skills</u>, 1990, <u>70</u>, 268-270.
- Persinger, M.A., & Makarec, K. Exotic beliefs may be substitutes for religious beliefs. Perceptual and Motor Skills, 1990, 71, 16-18.
- Persinger, M.A., & Derr, J.S. Geographical variables and behavior: LXI. UFO reports in Carman Manitoba and the 1975 Minnesota quake: evidence of triggering by increased volume of the Red River. Perceptual and Motor Skills, 1990, 71, 531-536.
- Persinger, M.A., & Derr, J.S. Geophysical variables and behavior: LXII. Temporal coupling of UFO reports and seismic energy release within the Rio Grande rift system: discriminative validity of the tectonic strain theory. Perceptual and Motor Skills, 1990, 71, 567-572.
- Derr, J.S., & Persinger, M.A. Geophysical variables and behavior: LXIII. Quasiexperimental evidence of the tectonic strain theory of luminous phenomena: the Derby, Colorado earthquakes. <u>Perceptual and Motor Skills</u>, 1990, <u>71</u>, 707-714.
- Persinger, M.A., & Fisher, S.D. Elevated, specific temporal lobe signs in a population engaged in psychic studies. <u>Perceptual and Motor Skills</u>, 1990, <u>71</u>, 817-818.
- Derr, J.S., & Persinger, M.A. Luminous phenomena and seismic energy in the central United States. <u>Journal of Scientific Exploration</u>, 1990, <u>4</u>(1), 55-69.
- Ruttan, L., Persinger, M.A., & Koren, S. Enhancement of temporal lobe-related experiences during brief exposures to milligauss intensity extremely low frequency magnetic fields. <u>Journal of Bioelectricity</u>, 1990, 9(1), 33-54.
- Makarec, K., & Persinger, M.A. Electroencephalographic validation of temporal lobe signs inventory in a normal population. <u>Journal of Research in Personality</u>, 1990, <u>24</u>,

- Berger, R.E., & Persinger, M.A. Geophysical variables and behavior: LXVII. Quieter annual geomagnetic activity and larger effect size for experimental PSI (ESP) studies over six decades. <u>Perceptual and Motor Skills</u>, 1991, <u>73</u>, 1219-1223.
- Harrigan, T., Peredery, O., & Persinger, M.A. Radial maze deficits and mediodorsal thalamic damage in context of multifocal, seizure-induced brain lesions. <u>Behavioral Neuroscience</u>, 1991, 105(3), 482-486.
- Persinger, M.A. Preadolescent religious experience enhances temporal lobe signs in normal young adults. <u>Perceptual and Motor Skills</u>, 1991, <u>72</u>, 453-454.
- Persinger, M.A. Geophysical variables and behavior: LXVI. Geomagnetic storm sudden commencements and commercial air crashes. <u>Perceptual and Motor Skills</u>, 1991, <u>72</u>, 476-478.
- Falter, P., & Persinger, M.A. Improved arithmetic skills in French-Immersion grade-school students are confounded by higher intelligence. <u>Perceptual and Motor Skills</u>, 1991, <u>72</u>, 772-774.
- Persinger, M.A. Subjective pseudocyesis (False Pregnancy) and elevated temporal lobe signs: An implication. <u>Perceptual and Motor Skills</u>, 1991, <u>72</u>, 499-503.
- Reid, K., Falter, M., & Persinger, M.A. Humoral (immunological) responses in female albino rats during rotating magnetic field exposures. <u>International Journal of Biometeorology</u>, 1991, 34, 239-241.
- von Kirchenheim, C., & Persinger, M.A. Time distortion a comparison of hypnotic inductions and progressive relaxation procedures: a brief communication. <u>The International Journal of Clinical and Experimental Hypnosis</u>, 1991, 39(2), 63-66.
- Bureau, Y.R.J., & Persinger, M.A. Cholinergic rebound after chlorpromazine exacerbates lithium muscarinic-induced limbic seizures in rats: implications for psychiatric treatment. <u>Psychological Reports</u>, 1991, <u>69</u>, 171-176.
- Falter, H., Persinger, M.A., &Reid, K. Sex differences in primary humoral responses of albino rats to human serum albumin. <u>Immunology Letters</u>, 1991, <u>28</u>, 143-146.
- Hodge, K.A., & Persinger, M.A. Quantitative increases in temporal lobe symptoms in human males are proportional to postnatal geomagnetic activity: verification by canonical correlation. <u>Neuroscience Letters</u>, 1991, <u>125</u>, 205-208.
- Richards, P., & Persinger, M.A. Temporal lobe signs, the dissociative experiences scale and the hemispheric quotient. <u>Perceptual and Motor Skills</u>, 1991, 72, 1139-1142.

- Persinger, M.A. Canonical correlation of a temporal lobe signs scale with schizoid and hypomania scales in a normal population: Men and women are similar but for different reasons. <u>Perceptual and Motor Skills</u>, 1991, <u>73</u>, 615-618.
- Persinger, M.A., & Makarec, K. Psychometric differentiation of men and women by the Personal Philosophy Inventory. <u>Journal of Personality and Individual Differences</u>, 1991, <u>12</u>(12), 1267-1271.
- Persinger, M.A., Koren, S.A., Makarec, K., Richards, P., & Youlton, S. Differential effects on wave form and the subject's possible temporal lobe signs upon experiences during cerebral exposure to weak intensity magnetic fields. <u>Journal of Bioelectricity</u>, 1991, 10(1 & 2), 141-184.
- Persinger, M.A., & Richards, P. Tobacyk's Paranormal Belief Scale and Temporal Lobe Signs: Sex Differences in the Experiences of Ego-Alien Intrusions. <u>Perceptual and Motor Skills</u>, 1991, <u>73</u>, 1151-1156.
- Persinger, M.A., & Makarec, K. Interactions between temporal lobe signs, imaginings, beliefs and gender: their effect upon logical inference. <u>Imagination, Cognition, and Personality</u>, 1991, <u>11</u>(2), 149-166.
- Persinger, M.A., & Makarec, K. Greater right hemisphericity is associated with lower self-esteem in adults. <u>Perceptual and Motor Skills</u>, 1991, 73, 1244-1246.
- Peredery, O., Persinger, M.A., Blomme, C., & Parker, G. Absence of maternal behavior in rats with lithium/pilocarpine seizure-induced brain damage: support of MacLean's triune brain theory. <u>Physiology and Behavior</u>, 1992, 52, 665-671.
- Falter, H., Persinger, M.A., & Chrétien, R. Transient suppression of a secondary humoral response in rats is evoked by lithium/pilocarpine-induced limbic seizures. <a href="https://pharmacology.biochemistry.and-Behavior">Pharmacology.biochemistry.and-Behavior</a>, 1992, 43, 315-317.
- Bureau, Y.R.J., & Persinger, M.A. Geomagnetic activity and enhanced mortality in rats with acute (epileptic) limbic lability. <u>International Journal of Biometereology</u>, 1992, 36, 226-232.
- Lafrenière, G.F., Peredery, O., & Persinger, M.A. Progressive accumulation of large aggregates of calcium containing polysaccharides and basophilic debris within specific thalamic nuclei after lithium/pilocarpine-induced seizures. Brain Research Bulletin, 1992, 28, 825-830.
- Persinger, M.A., & Falter, H. Infantile stimulation produces mild enhancement in a primary humoral response of adult albino rats. <u>Psychological Reports</u>, 1992, <u>70</u>, 976-978.

- Persinger, M.A. Criterion validity for Rotton's paralogic test: beliefs of forbidden knowledge may negatively affect inferential problem solving. <u>Perceptual and Motor Skills</u>, 1992, <u>74</u>, 296-298.
- Richards, P., & Persinger, M.A. Toe graphaesthesia as a discriminator of brain impairment: the outstanding feet for neuropsychology. <u>Perceptual and Motor Skills</u>, 1992, 74, 1027-1030.
- Persinger, M. A. Neuropsychological profiles of adults who report "sudden remembering" of early childhood memories: implications for claims of sex abuse and alien visitation/abduction experiences. <u>Perceptual and Motor Skills</u>, 1992, <u>75</u>, 259-266.
- Lavallée, M.R., & Persinger, M.A. Left ear (right temporal lobe) suppressions during dichotic listening, ego-alien intrusion experiences and spiritualistic beliefs in normal women. <u>Perceptual and Motor Skills</u>, 1992, <u>75</u>, 547-551.
- Persinger, M.A. Right hemisphericity, low self-esteem, and unusual experiences: a response to Vingiano. <u>Perceptual and Motor Skills</u>, 1992, <u>75</u>, 568-570.
- Richards, P.M., Koren, S.A., & Persinger, M.A. Experimental stimulation by burst-firing weak magnetic fields over the right temporal lobe may facilitate apprehension in women. Perceptual and Motor Skills, 1992, 75, 667-670.
- Munro, C., & Persinger, M.A. Relative right temporal-lobe theta activity correlates with Vingiano's hemispheric quotient and the "sensed presence". Perceptual and Motor Skills, 1992, 75, 899-903.
- Persinger, M.A. Enhanced incidence of "the sensed presence" in people who have learned to meditate: support for the right hemispheric intrusion hypothesis. <u>Perceptual and Motor Skills</u>, 1992, 75, 1308-1310.
- Persinger, M.A., & Makarec, K. The feeling of a presence and verbal meaningfulness in context of temporal lobe function: Factor analytic verification of the muses? <u>Brain and Cognition</u>, 1992, <u>20</u>, 217-226.
- Missaghi, B., Richards, P.M., & Persinger, M.A. Severity of experimental allergic encephalomyelitis in rats depends upon the temporal contiguity between limbic seizures and inoculation. <a href="https://persinger.com/Pharmacology">Pharmacology</a>, Biochemistry, and Behavior, 1992, 43, 1081-1086.
- Lazure, C.-L., & Persinger, M.A. Right hemisphericity and low self-esteem in high school students: A replication. <u>Perceptual and Motor Skills</u>, 1992, <u>75</u>, 1058.

- Persinger, M.A., Balance, S., & Moland, M. Snow fall and heart attacks. <u>Journal of Psychology</u>, 1992, 127(2), 243-252.
- Bureau, Y.R.J., & Persinger, M.A. Transient blocking of persistent gnawing by haloperidol in rats with seizure-induced multifocal brain damage. <u>Life Sciences</u>, 1993, <u>52</u>, 869-876.
- Bureau, Y.R.J., & Persinger, M.A. Extreme hypothermia induced by a synergism of acute limbic seizures, physical restraint, and acepromazine: implications for survival following brain injury. <u>Psychological Reports</u>, 1993, 72, 248-250.
- Persinger, M.A. Transcendental meditation and general meditation are associated with enhanced complex partial epileptic-like signs: Evidence for "cognitive" kindling? Perceptual and Motor Skills, 1993, 76, 80-82.
- Persinger, M.A. Geophysical variables and behavior: LXXI. Differential contribution of geomagnetic activity to paranormal experiences concerning death and crisis: An alternative to the ESP hypothesis. <u>Perceptual and Motor Skills</u>, 1993, 76, 555-562.
- Gillis, C., & Persinger, M.A. Shifts in the Plutchik Emotion Profile Indices following three weekly treatments with pulsed vs continuous cerebral magnetic fields. <u>Perceptual and Motor Skills</u>, 1993, <u>76</u>, 168-170.
- Persinger, M.A. Paranormal and religious beliefs may be mediated differentially by subcortical and cortical phenomenological processes of the temporal (limbic) lobes. <u>Perceptual and Motor Skills</u>, 1993, <u>76</u>, 247-251.
- Persinger, M.A. Average diurnal changes in melatonin levels are associated with hourly incidence of bereavement apparitions: Support for the hypothesis of temporal (limbic) lobe microseizuring. <u>Perceptual and Motor Skills</u>, 1993, <u>76</u>, 444-446.
- Persinger, M.A. & Makarec, K. Complex partial epileptic-like signs as a continuum from normals to epileptics: Normative data and clinical populations. <u>Journal of Clinical Psychology</u>, 1993, 49(1), 33-45.
- Persinger, M.A. Personality changes following brain injury as a grief response to the loss of sense of self: Phenomenological themes as indices of local lability and neurocognitive structuring as psychotherapy. <u>Psychological Reports</u>, 1993, <u>72</u>, 1059-1068.
- Persinger, M.A. Vectorial cerebral hemisphericity as differential sources for the sensed presence, mystical experiences and religious conversions. <u>Perceptual and Motor Skills</u>, 1993, 76, 915-930.
- Persinger, M.A., Bureau, Y.R.J., Kostakos, M., Peredery, O., & Falter, H. Behaviors of rats

- with insidious multifocal brain damage induced by seizures following single peripheral injections of lithium and pilocarpine. <u>Physiology and Behavior</u>, 1993, 53, 849-866.
- Richards, P., Persinger, M.A., & Koren, S.A. Modification of activation and evaluation properties of narratives by weak complex magnetic field patterns that simulate limbic burst firing. <u>International Journal of Neuroscience</u>, 1993, <u>71</u>, 71-85.
- Skirda, R.J., & Persinger, M.A. Positive associations between dichotic listening errors, complex partial epileptic-like signs and paranormal beliefs. <u>Journal of Nervous and Mental Disease</u>, 1993, 181(11), 663-667.
- Kostakos, M., Persinger, M.A., & Peredery, O. Deficits in working but not reference memory in adult rats in which limbic seizures had been induced before weaning: Implications for early brain injuries. <u>Neuroscience Letters</u>, 1993, <u>158</u>, 209-212.
- Makarec, K., & Persinger, M.A. Bilingual men but not women display verbal memory weaknesses but not figural memory differences compared to monolinguals. <u>Personality and Individual Differences</u>, 1993, 15(5), 531-536.
- Persinger, M.A., & Derr, J.S. Geophysical variables and behavior: LXXIV. Man-made fluid injections into the crust and reports of luminous phenomena (UFO reports)--Is the strain field an aseismically propagating hydrological pulse? Perceptual and Motor Skills, 1993, 77, 1059-1065.
- Derr, J.S., & Persinger, M.A. Geophysical variables and behavior: LXXVI. Seasonal hydrological load and regional luminous phenomena (UFO reports) within river systems: The Mississippi Valley test. <u>Perceptual and Motor Skills</u>, 1993, <u>77</u>, 1163-1170.
- Dittburner, T.-L., & Persinger, M.A. Intensity of amnesia during hypnosis is positively correlated with estimated prevalence of sexual abuse and alien abductions: implications for the false memory syndrome. Perceptual and Motor Skills, 1993, 77, 895-898.
- Persinger, M.A., & Makarec, K. Reinforcement generalization as interaction between processes rather than events: absence of schedule-induced hyperdispsia in rats with histories of minimal food-water contiguity. Perceptual and Motor Skills, 1993, 77, 751-754.
- Bisson, C., & Persinger, M.A. Geophysical variables and behavior: LXXV. Possible increased incidence of brain tumors in a population following an episode of luminous phenomena. Perceptual and Motor Skills, 1993, 77, 1088-1090.
- Persinger, M.A. Seizure suggestibility may not be an exclusive differential indicator

- between psychogenic and partial complex seizures: the presence of a third factor. <u>Seizure</u>, 1994, <u>3</u>, 215-219.
- Fleming, J.L., Persinger, M.A., & Koren, S.A. Magnetic pulses elevate nociceptive thresholds: Comparisons with opiate receptor compounds in normal and seizure-induced brain-damaged rats. <u>Electro- and Magnetobiology</u>, 1994, 13(1), 67-75.
- Persinger, M.A. Maintained hypersexuality between male rats following chronically induced limbic seizures: Implications for bisexuality in complex partial epileptic seizures. <u>Psychological Reports</u>, 1994, <u>74</u>, 647-652.
- Persinger, M.A. Elicitation of "childhood memories" in hypnosis-like settings is associated with complex partial epileptic-like signs for women but not for men: Implications for the false memory syndrome. Perceptual and Motor Skills, 1994, 78, 643-651.
- Persinger, M.A., Bureau, Y.R.J., Peredery, O.P., & Richards, P.M. The sensed presence as right hemispheric intrusions into the left hemispheric awareness of self: An illustrative case study. <u>Perceptual and Motor Skills</u>, 1994, 78, 999-1009.
- Persinger, M.A., Bureau, Y.R., & Peredery, O. Dissociation between conditioned taste aversion and radial maze learning following seizure-induced multifocal brain damage: Quantitative tests of serial vs. parallel circuit models of memory. <a href="https://physiology.ndbehavior.1994">Physiology.ndbehavior.1994</a>, <a href="https://persinger.265">56(2)</a>, <a href="https://persinger.265">225-235</a>.
- Bureau, Y.R.J., Peredery, O., & Persinger, M.A. Concordance of quantitative damage within the diencephalon and telencephalon following systemic pilocarpine (380 mg/kg) or lithium (3 mEq/kg)/pilocarpine (30 mg/kg) induced seizures. Brain Research, 1994, 648, 265-269.
- Harrigan, T., Bureau, Y.R.J., Persinger, M.A., & Parker, G.H. Prevention of sudden cardiac death by the atypical neuroleptic acepromazine following status epilepticus in rats. <u>Life Sciences</u>, 1994, 54(24), 457-462.
- Chellew, G., & Persinger, M.A. Women but not men exhibit a positive correlation between complex partial epileptic-like signs and tactile-visual cross-modal matching: implications for hemispheric intercalation. <u>Perceptual and Motor Skills</u>, 1994, 78, 1312-1314.
- Persinger, M.A., & Richards, P.M. Alterations in pleasantness but not activation when long-term memories are reconstructed during contextual versus noncontextual settings. Perceptual and Motor Skills, 1994, 79, 95-98.
- Persinger, M.A. Sense of a presence and suicidal ideation following brain injury: indications of right- hemispheric intrusions from neuropsychological profiles.

- Psychological Reports, 1994, 75, 1059-1070.
- Persinger, M.A., & Richards, P.M. Quantitative electroencephalographic validation of left and right temporal lobe signs and indicators in normal people. <u>Perceptual and Motor Skills</u>, 1994, 79, 1571-1578.
- Churchill, D.R., Persinger, M.A., & Thomas, A.W. Geophysical variables and behavior: LXXVII. Increased geomagnetic activity and decreased pleasantness of spontaneous narratives for percipients but not agents. <u>Perceptual and Motor Skills</u>, 1994, 79, 387-392.
- Tiller, S.G., & Persinger, M.A. Elevated incidence of a sensed presence and sexual arousal during partial sensory deprivation and sensitivity to hypnosis: implications for hemisphericity and gender differences. <u>Perceptual and Motor Skills</u>, 1994, <u>79</u>, 1527-1531.
- Persinger, M.A., Richards, P.M. & Koren, S.A. Differential ratings of pleasantness following right and left hemispheric application of low energy magnetic fields that simulate long-term potentiation. <u>International Journal of Neuroscience</u>, 1994, <u>79</u>, 191-197.
- Tiller, S.G., & Persinger, M.A. Enhanced hypnotizability by cerebrally applied magnetic fields depends upon the order of hemispheric presentation: an anisotropic effect. <u>International Journal of Neuroscience</u>, 1994, 79, 157-163.
- Richards, P., & Persinger, M.A. Foot agility and social anxiety in older children (9-15 years). Perceptual and Motor Skills, 1994, 79, 431-434.
- Roberts, M.A., Persinger, M.A., Grote, C., Evertowski, L.M., Springer, J.A., Tuten, T., Moulden, D., Franzen, K.M., Roberts, R.J., & Baglio, C.S. The Dichotic Word Listening Test: Preliminary observations in American and Canadian samples. <u>Applied Neuropsychology</u>, 1994, 1, 45-56.
- Persinger, M.A., & Richards, P.M. Women reconstruct more details than men for a complex five-minute narrative: implications for right hemispheric factors in the serial memory effect. <a href="Perceptual and Motor Skills">Perceptual and Motor Skills</a>, 1995, 80, 403-410.
- Persinger, M.A. Complex partial epileptic-like signs contribute differential sources of variance to low self-esteem and imaginings. <u>Perceptual and Motor Skills</u>, 1995, <u>80</u>, 427-431.
- Baker, P., & Persinger, M.A. Early genital stimulation of rats lowers limbic seizure latencies for females but increases latencies for males. <u>Psychological Reports</u>, 1995, <u>76</u>, 547-552.
- Bureau, Y.R.J., & Persinger, M.A. Decreased incidence of limbic motor seizures following

- twenty pairings of subclinical lithium-pilocarpine injections and a complex "burst-firing" magnetic field. <u>Electro- and Magnetobiology</u>, 1995, <u>14(1)</u>, 1-6.
- Makarec, K., & Persinger, M.A. Complex partial epileptic-like signs and differential visual search times for normal men and normal women: implications for functional lateralization. <u>Personality and Individual Differences</u>, 1995, <u>18</u>(5), 643-651.
- Bédard, A.W., & Persinger, M.A. Prednisolone blocks extreme intermale social aggression in seizure-induced brain-damaged rats: implications for the amygdaloid central nucleus, corticotrophin-releasing factor and electrical seizures. Psychological Reports, 1995, 77, 3-9.
- Persinger, M.A. Out-of-body-like experiences are more probable in people with elevated complex partial epileptic-like signs during periods of enhanced geomagnetic activity: a nonlinear effect. <u>Perceptual and Motor Skills</u>, 1995, <u>80</u>, 563-569.
- Persinger, M.A. On the possibility of directly accessing every human brain by electromagnetic induction of fundamental algorithms. <u>Perceptual and Motor Skills</u>, 1995, <u>80</u>, 791-799.
- Carrey, N.J., Butter, H.J., Persinger, M.A., & Bialik, R.J. Physiological and cognitive correlates of child abuse. <u>Journal of American Academy of Child & Adolescent Psychiatry</u>, 1995, 34(8), 1067-1075.
- Bureau, Y.R., & Persinger, M.A. Decreased latencies for limbic seizures induced in rats by lithium-pilocarpine occur when daily average geomagnetic activity exceeds 20 nanoTesla. Neuroscience Letters, 1995, 192, 142-144.
- Persinger, M.A., & Richards, P.M. Vestibular experiences of humans during brief periods of partial sensory deprivation are enhanced when daily geomagnetic activity exceeds 15-20 nT. <u>Neuroscience Letters</u>, 1995, 194, 69-72.
- Persinger, M.A. Neuropsychologica Principia Brevita: an application to traumatic (acquired) brain injury. <u>Psychological Reports</u>, 1995, <u>77</u>, 707-724.
- Persinger, M.A. Sudden unexpected death in epileptics following sudden, intense, increases in geomagnetic activity: prevalence of effect and potential mechanisms. <u>International Journal of Biometeorology</u>, 1995, 38, 180-187.
- Persinger, M.A. Geophysical variables and behavior: LXXIX. Overt limbic seizures are associated with concurrent and pre-midscotophase geomagnetic activity: synchronization by prenocturnal feeding. <u>Perceptual and Motor Skills</u>, 1995, <u>81</u>, 83-93.
- Desjardins, D., & Persinger, M.A. Association between intermale social aggression and

- cellular density within the central amygdaloid nucleus in rats with lithium/pilocarpine-induced seizures. <u>Perceptual and Motor Skills</u>, 1995, <u>81</u>, 635-641.
- Persinger, M.A., & Richards, P.M. Foot agility and toe gnosis/graphaesthesia as potential indicators of integrity of the medial cerebral surface: normative data and comparison with clinical populations. <u>Perceptual and Motor Skills</u>, 1995, <u>80</u>, 1011-1024.
- Persinger, M.A. Clinical neurological indicators are only moderately correlated with quantitative neuropsychological test scores in patients who display mild-moderate brain impairment following closed head injuries. <u>Perceptual and Motor Skills</u>, 1995, 81, 1283-1292.
- Baker-Price, L., & Persinger, M.A. Weak, but complex pulsed magnetic fields may reduce depression following traumatic brain injury. <u>Perceptual and Motor Skills</u>, 1996, <u>83</u>, 491-498.
- Bureau, Y.R.J., Persinger, M.A., & Parker, G. Effect of enhanced geomagnetic activity on hypothermia and mortality in rats. <u>International Journal of Biometeorology</u>, 1996, 39, 197-200.
- Cook, L.L., & Persinger, M.A. Long-term consequences of subtle stimuli during the first twenty-four hours of seizure-induced brain injury. <u>Perceptual and Motor Skills</u>, 1996, <u>83</u>, 523-529.
- Dubois, S.L., & Persinger, M.A. Personality profiles of women who report and who do not report physical or sexual harassment: comparisons with traumatic brain injury. Social Behavior and Personality, 1996, 24(1), 87-94.
- Freeman, J., & Persinger, M.A. Repeated verbal interruption during exposure to complex transcerebral magnetic fields elicit irritability: implications for opiate effects. <u>Perceptual and Motor Skills</u>, 1996, 82, 639-642.
- Healey, F., Persinger, M.A., & Koren, S.A. Enhanced hypnotic suggestibility following application of burst-firing magnetic fields over the right temporoparietal lobes: a replication. <u>International Journal of Neuroscience</u>, 1996, <u>87</u>, 201-207.
- Krippner, S., & Persinger, M. Evidence for enhanced congruence between dreams and distant target material during periods of decreased geomagnetic activity. <u>Journal of Scientific Exploration</u>, 1996, <u>10</u>(4), 487-493.
- Michon, A., Koren, S.A., & Persinger, M.A. Attempts to simulate the association between geomagnetic activity and spontaneous seizures in rats using experimentally generated magnetic fields. <u>Perceptual and Motor Skills</u>, 1996, 82, 619-626.

- Moulden, J.A., & Persinger, M.A. Visuospatial/vocabulary differences in boys and girls and a potential age-dependent drift in vocabulary proficiency. <u>Perceptual and Motor Skills</u>, 1996, <u>82</u>, 472-474.
- O'Connor, R.P. & Persinger, M.A. Brief Communication: Increases in geomagnetic activity are associated with increases in thyroxine levels in a single patient: Implications for melatonin levels. <u>International Journal of Neuroscience</u>, 1996, <u>88</u>, 243-247.
- Persinger, M.A. Subjective pseudocyesis in normal women who exhibit enhanced imaginings and elevated indicators of electrical lability within the temporal lobes: implications for the "Missing Embryo Syndrome". Social Behavior and Personality, 1996, 24,(2), 101-112.
- Persinger, M.A. Enhancement of limbic seizures by nocturnal application of experimental magnetic fields that simulate the magnitude and morphology of increases in geomagnetic activity. <u>International Journal of Neuroscience</u>, 1996, <u>86</u>, 271-280.
- Persinger, M.A. Feelings of past lives as expected perturbations within the neurocognitive processes that generate the sense of self: contributions from limbic lability and vectorial hemisphericity. <u>Perceptual and Motor Skills</u>, 1996, <u>83</u>, 1107-1121.
- Persinger, M.A., Hart, B., & Thomas, A.W. Geophysical variables and behavior: LXXX. Periodicities and energetic characteristics of a strobe-light luminosity during a geomagnetic storm. Perceptual and Motor Skills, 1996, 82, 683-688.
- Richards, P., Persinger, M.A., & Koren, S.A. Modification of semantic memory in normal subjects by application across the temporal lobes of a weak (1 microT) magnetic field structure that promotes long-term potentiation in hippocampal slices. <u>Electroand Magnetobiology</u>, 1996, 15(2), 141-148.
- Salmoni, A., Richards, P.M., & Persinger, M.A. Absence of frontal lobe dysfunction indicators in healthy elderly participants: Comparisons with verified pre-frontal lobe damage. <u>Developmental Neuropsychology</u>, 1996, <u>12</u>(2), 201-206.
- Cook, C.M., & Persinger, M.A. Experimental induction of the "sensed presence" in normal subjects and an exceptional subject. <u>Perceptual and Motor Skills</u>, 1997, <u>85</u>, 683-693.
- Healey, F., Persinger, M.A., & Koren, S.A. Control of choice by application of the electromagnetic field equivalents of spoken words: mediation by emotional meaning rather than linguistic dimensions? <u>Perceptual and Motor Skills</u>, 1997, <u>85</u>, 1411-1418.

- Michon, A.L., & Persinger, M.A. Experimental simulation of the effects of increased geomagnetic activity upon nocturnal seizures in epileptic rats. <u>Neuroscience Letters</u>, 1997, 224, 53-56.
- O'Connor, R.P., & Persinger, M.A. Geophysical variables and behavior LXXXII: A strong association between sudden infant death syndrome (SIDs) and increments of global geomagnetic activity possible support for the melatonin hypothesis. <a href="Perceptual and Motor Skills">Perceptual and Motor Skills</a>, 1997, 84, 395-402.
- Persinger, M.A. Geomagnetic variables in behavior: LXXXIII. Increased geomagnetic activity and group aggression in chronic epileptic male rats. <u>Perceptual and Motor Skills</u>, 1997, 85, 1376-1378.
- Persinger, M.A. Metaphors for the effects of weak, sequentially complex magnetic fields. <u>Perceptual and Motor Skills</u>, 1997, <u>85</u>, 204-206.
- Persinger, M.A. Depression following brain trauma is enhanced in patients with mild discrepancies between intelligence and impairment on neuropsychological scores. <u>Perceptual and Motor Skills</u>, 1997, <u>84</u>, 1284-1286.
- Persinger, M.A. Reported prevalence of unconsciousness from mechanical impact to the head in university populations during a fifteen-year period. Perceptual and Motor Skills, 1997, 85, 445-446.
- Persinger, M.A. I would kill in God's name: Role of sex, weekly church attendance, report of a religious experience and limbic lability. <u>Perceptual and Motor Skills</u>, 1997, <u>85</u>, 128-130.
- Persinger, M.A., Peredery, O., Bureau, Y.R.J., & Cook, L.L. Emergent properties following brain injury: The claustrum as a major component of a pathway that influences nociceptive thresholds to foot shock in rats. <u>Perceptual and Motor Skills</u>, 1997, <u>85</u>, 387-398.
- Persinger, M.A., Richards, P.M., & Koren, S.A. Differential entrainment of electroencephalographic activity by weak complex electromagnetic fields. Perceptual and Motor Skills, 1997, 84, 527-536.
- Thomas, A.W., & Persinger, M.A. Daily post-training exposure to pulsed magnetic fields that evoke morphine-like analgesia affects consequent motivation but not proficiency in maze learning in rats. <u>Electro- and Magnetobiology</u>, 1997, <u>16(1)</u>, 33-41.
- Cook, L.L., & Persinger, M.A. "Subclinical" dosages of lithium and pilocarpine that do not evoke overt seizures affect long-term spatial memory but not learning in rats. Perceptual and Motor Skills, 1998, 86, 1288-1290.

- Mulligan, S., & Persinger, M.A. Perinatal exposure to ELF (0.5 Hz) rotating magnetic fields demasculinizes neuronal density in the medial preoptic nucleus of male rats. Neuroscience Letters, 1998, 253, 29-32.
- O'Gorman, K.A., & Persinger, M.A. Hypnotic induction profiles, contextual innuendo and delayed intrusion errors for a narrative: searching for mediating variables. <u>Perceptual and Motor Skills</u>, 1998, <u>87</u>, 587-593.
- Persinger, M.A. Anticipatory cues can interfere with inhibitory operant behavior in the rat. <u>Perceptual and Motor Skills</u>, 1998, <u>87</u>, 304-306.
- Persinger, M.A. Putative perception of rotating permanent magnetic fields following ingestion of LSD. <u>Perceptual and Motor Skills</u>, 1998, <u>87</u>, 601-602.
- Persinger, M.A., & Koren, S.A. Persistent elevation of nocturnal activity in rodents following apparent recovery from lithium/pilocarpine-induced limbic seizures. <u>Perceptual and Motor Skills</u>, 1998, 86, 1243-1248.
- Persinger, M.A., Peredery, O., Desjardins, D., & Eastman, A. Ventricular dilatation over several weeks following induction of excitotoxic (systemic lithium/pilocarpine) lesions: Potential role of damage to the substantia nigra reticulata. <u>International Journal of Neuroscience</u>, 1998, 94, 63-74.
- Persinger, M.A., Webster, D., & Tiller, S.G. SPECT (HMPAO) support for the activation of the medial prefrontal cortices during toe graphaesthesia. <u>Perceptual and Motor Skills</u>, 1998, <u>87</u>, 59-63.
- Renton, C.M., & Persinger, M.A. Elevations of complex partial epileptic-like experiences during increased geomagnetic activity for women reporting premenstrual syndrome. <u>Perceptual and Motor Skills</u>, 1998, <u>86</u>, 240-242.
- Richards, P.M., & Persinger, M.A. Numbers of details in the reconstruction of an emotional narrative decrease linearly as a function of time. <u>Perceptual and Motor Skills</u>, 1998, 87, 216-218.
- Richards, P.M., Persinger, M.A., & Michel, R.N. Ontogeny of two-point discrimination for fingers and toes in children (ages 7 through 15 years). Perceptual and Motor Skills, 1998, 86, 1259-1262.
- St-Pierre, L.S., & Persinger, M.A. Geophysical variables and behavior: LXXXIV. Quantitative increases in group aggression in male epileptic rats during increases in geomagnetic activity. <u>Perceptual and Motor Skills</u>, 1998, <u>86</u>, 1392-1394.
- St-Pierre, L.S., Persinger, M.A., & Koren, S.A. Experimental induction of intermale

- aggressive behavior in limbic epileptic rats by weak, complex magnetic fields: implications for geomagnetic activity and the modern habitat? <u>International Journal of Neuroscience</u>, 1998, 96, 149-159.
- Tiller, S.G., & Persinger, M.A. Test-retest scores for patients who display neuropsychological impairment following "mild head injuries" from mechanical impacts. Perceptual and Motor Skills, 1998, 86, 1240-1242.
- Cook, L.L., & Persinger, M.A. Infiltration of lymphocytes in the limbic brain following stimulation of subclinical cellular immunity and low dosages of lithium and a cholinergic agent. <u>Toxicology Letters</u>, 1999, <u>109</u>, 77-85.
- Cook, C.M., Koren, S.A., & Persinger, M.A. Subjective time estimation by humans is increased by counterclockwise but not clockwise circumcerebral rotations of phase-shifting magnetic pulses in the horizontal plane. <u>Neuroscience Letters</u>, 1999, 268, 61-64.
- McKay, B.E., & Persinger, M.A. Geophysical variables and behavior: LXXXVII. Effects of synthetic and natural geomagnetic patterns on maze learning. <u>Perceptual and Motor Skills</u>, 1999, 89, 1023-1024.
- O'Connor, R.P., & Persinger, M.A. Geophysical variables and behavior: Sudden infant death, bands of geomagnetic activity, and pcl (0.2 to 5 Hz) geomagnetic pulsations. <u>Perceptual and Motor Skills</u>, 1999, <u>88</u>, 391-397.
- Persinger, M.A. Wars and increased solar-geomagnetic activity: Aggression or change in intraspecies dominance? <u>Perceptual and Motor Skills</u>, 1999, <u>88</u>, 1351-1355.
- Persinger, M.A. On the nature of space-time in the perception of phenomena in science. Perceptual and Motor Skills, 1999, 88, 1210-1216.
- Persinger, M.A. Discrepancies between standardized measures of cognitive level and Halstead-Reitan Impairment Indices as inferences of brain damage following head injuries. Perceptual and Motor Skills, 1999, 89, 629-641.
- Persinger, M.A. Is there more than one source for the temporal binding factor for human consciousness? <u>Perceptual and Motor Skills</u>, 1999, <u>89</u>, 1259-1262.
- Persinger, M.A. Increased emergence of alpha activity over the left but not the right hemisphere within a dark acoustic chamber: Differential response of the left but not the right hemisphere to transcerebral magnetic fields. <u>International Journal of Psychophysiology</u>, 1999, 34, 163-169.
- Persinger, M.A., & Bélanger-Chellew, G. Facilitation of seizures in limbic epileptic rats by complex 1 microtesla magnetic fields. <u>Perceptual and Motor Skills</u>, 1999, <u>89</u>,

- Persinger, M.A., & Hodge, K.-A. Geophysical variables and behavior: geomagnetic activity as a partial parturitional trigger- are male babies more affected than female babies? Perceptual and Motor Skills, 1999, 88, 1177-1180.
- Persinger, M.A., Moulden, J.A., & Richards, P.M. Incremental improvement of dichotic left ear accuracy and toe gnosis between 9 and 10 years of age: implications for maturation of a portion of the corpus callosum and the sense of self. <u>Laterality</u>, 1999, <u>4</u>, 379-387.
- Persinger, M.A., & O'Connor, R.P. A linear relationship between postnatal geomagnetic activity and self reports of epileptic seizures in young adults. <u>Perceptual and Motor Skills</u>, 1999, 89, 368-370.
- Persinger, M.A., & Tiller, S.G. Personality not intelligence or educational achievement differentiate university students who access special needs for "learning disabilities". Social Behavior and Personality, 1999, 27, 1-10.
- Persinger, M.A., Tiller, S.G., & Koren, S.A. Background sound pressure fluctuations (5 db) from overhead ventilation systems increase subjective fatigue of university students during three-hour lectures. <u>Perceptual and Motor Skills</u>, 1999, <u>88</u>, 451-456.
- McKay, B.E., & Persinger, M.A. Application timing of complex magnetic fields delineates windows of posttraining-pretesting vulnerability for spatial and motivational behaviors in rats. <u>International Journal of Neuroscience</u>, 2000, <u>103</u>, 69-77.
- Moulden, J.A., & Persinger, M.A. Delayed left ear accuracy during childhood and early adolescence as indicated by Roberts' Dichotic Listening Test. <u>Perceptual and Motor Skills</u>, 2000, <u>90</u>, 893-898.
- Persinger, M.A. Cattell 16 personality profiles of patients following closed-head injuries. <u>Perceptual and Motor Skills</u>, 2000, <u>90</u>, 25-26.
- Persinger, M.A. Subjective improvement following treatment with carbamazepine (Tegretol) for a subpopulation of patients with traumatic brain injuries. <u>Perceptual and Motor Skills</u>, 2000, <u>90</u>, 37-40.
- Persinger, M.A., Cook, L.L., & Koren, S.A. Suppression of experimental allergic encephalomyelitis in rats by brief, hourly nocturnal pulses of nanoTesla complex magnetic fields that simulate geomagnetic activity. <u>International Journal of Neuroscience</u>, 2000, 100, 107-116.
- Persinger, M.A., Tiller, S.G., & Koren, S.A. Experimental simulation of a haunt experience and paroxysmal electroencephalographic activity by transcerebral complex

- magnetic fields: Induction of a synthetic ghost? <u>Perceptual and Motor Skills</u>, 2000, 90, 659-674.
- Stewart, L.S., & Persinger, M.A. Pre-training exposure to physiologically patterned electromagnetic stimulation attenuates fear-conditioned analgesia. <u>International Journal of Neuroscience</u>, 2000, 100, 91-98.
- Cook, L.L., Persinger, M.A., & Koren, S.A. Differential effects of low frequency, low intensity (< 6 mG) nocturnal magnetic fields upon infiltration of mononuclear cells and numbers of mast cells in Lewis rat brains. <u>Toxicology Letters</u>, 2000, 118, 9-19.
- Peredery, O., Persinger, M.A., Parker, G., & Mastrosov, L. Temporal changes in neuronal dropout following inductions of lithium/ pilocarpine seizures in the rat. <u>Brain Research</u>, 2000, 881, 9-17.
- Cook, L.L., & Persinger, M.A. Suppression of experimental allergic encephalomyelitis is specific to frequency and intensity of nocturnally applied, intermittent magnetic fields in rats. <u>Neuroscience Letters</u>, 2000, 292, 171-174.
- Chrétien, R.D., & Persinger, M.A. "Prefrontal deficits" discriminate young offenders from age-matched controls: Juvenile delinquency as an expected feature of the normal distribution of prefrontal cerebral development. <u>Perceptual and Motor Skills</u>, 2000, 87, 1196-1202.
- McKay, B.E., Persinger, M.A., & Koren, S.A. Exposure to a theta-burst patterned magnetic field impairs memory acquisition and consolidation for contextual but not discrete conditioned fear in rats. <u>Neuroscience Letters</u>, 2000, 292, 99-102.
- Persinger, M.A., & Lalonde, C-A. Right to left hemispheric shift in occipital electroencephalographic responses related to Kimura figures. <u>Perceptual and Motor Skills</u>, 2000, 91, 273-278.
- Cook, C.M., & Persinger, M.A. Geophysical variables and behavior: XCII. Experimental elicitation of the experience of a sentient being by right hemispheric, weak magnetic fields: Interaction with temporal lobe sensitivity. Perceptual and Motor Skills, 2001, 92, 447-448.
- Derr, J.S., & Persinger, M.A. Geophysical variables and behavior: XCV. Annual January rainfall may modulate the incidence of luminous phenomena within the San Francisco Basin. <u>Perceptual and Motor Skills</u>, 2001, <u>92</u>, 1180-1190.
- Desjardins, D., Parker, G., Cook, L.L., & Persinger, M.A. Agonistic behavior in groups of limbic epileptic male rats: Pattern of brain damage and moderating effects from normal rats. <u>Brain Research</u>, 2001, 905, 26-33.

- Dixon, S.J., & Persinger, M.A. Suppression of analgesia in rats induced by morphine or I-Name but not both drugs by microtesla, frequency-modulated magnetic fields. <u>International Journal of Neuroscience</u>, 2001, 108, 87-97.
- Golanski, A.J., McKay, B.E., & Persinger, M.A. Postnatal anoxia from CO<sub>2</sub> for one minute produces sex-specific changes in contextual fear conditioning in adult rats. <u>Perceptual and Motor Skills</u>, 2001, 93, 677-678.
- Healey, F., & Persinger, M.A. Experimental production of illusory (false) memories in reconstructions of narratives: Effect size and potential mediation by right hemispheric stimulation from complex, weak magnetic fields. <u>International Journal of Neuroscience</u>, 2001, 106, 195-207.
- Lafrenière, G.F., & Persinger, M.A. Mast cell numbers in the young rat thalamus: A search for control factors. <u>International Journal of Neuroscience</u>, 2001, 108, 69-85.
- Lafrenière, G.F., Persinger, M.A., & Lafrenière, R.F. Effects of permanent residence with foster mothers and new siblings upon numbers of mast cells within the thalamus of preweaned rats. <u>Psychological Reports</u>, 2001, 88, 625-626.
- Persinger, M.A. Geophysical variables and behavior: X.C. What people consider strange: change in proportions of reports of Fortean phenomena over time. <u>Psychological Reports</u>, 2001, 88, 89-90.
- Persinger, M.A. Shifting gustatory thresholds and food cravings during pregnancy as expanding uterine-induced steady potential shifts within the insula: An hypothesis. Perceptual and Motor Skills, 2001, 92, 50-52.
- Persinger, M.A. The neuropsychiatry of paranormal experiences. <u>Journal of Neuropsychiatry and Clinical Neuroscience</u>, 2001, <u>13</u>(4), 515-524.
- Persinger, M.A., & Bélanger-Chellew, G. Brief successive temporal observational sampling as a possible indicator of daily overt seizure activity in epileptic rats. Perceptual and Motor Skills, 2001, 92, 95-98.
- Persinger, M.A., & Chellew-Bélanger, G. Synchronized feeding as a "conditioned stimulus" for overt seizures in chronically (limbic) epileptic rats: a model for "psychogenic seizures" with complex partial epilepsy. <u>International Journal of Neuroscience</u>, 2001, 106, 169-184.
- Persinger, M.A., & Koren, S.A. Experiences of spiritual visitation and impregnation: Potential induction by frequency-modulated transients from an adjacent clock. <u>Perceptual and Motor Skills</u>, 2001, 92, 35-36.
- Persinger, M.A., Koren, S.A., & O'Connor, R.P. Geophysical variables and behavior: CIV.

- Power-frequency magnetic field transients (5 Microtesla) and reports of haunt experiences within an electronically dense house. <u>Perceptual and Motor Skills</u>, 2001, <u>92</u>, 673-674.
- Persinger, M.A., & Mulligan, S. Decreased density of neurons in the medial preoptic nucleus and increased testicular weights for rats exposed perinatally to an 0.5 Hz rotating magnetic field. <u>International Journal of Neuroscience</u>, 2001, 108, 99-107.
- Persinger, M.A., & O'Connor, R.P. Geophysical variables and behavior: CIII. Days with sudden infant deaths and cardiac arrhythmias in adults share a factor with PC1 geomagnetic pulsations: Implications for pursuing mechanism. <u>Perceptual and Motor Skills</u>, 2001, 92, 653-654.
- Persinger, M.A., O'Connor, R.P., Bureau, Y.R.J., Parker, G.H., Peredery, O., & Zegil, M. Synergistic induction of severe hypothermia (poikilothermia) by limbic seizures, acepromazine and physical restraint: Role of noradrenergic á-l receptors. <u>Pharmacology, Biochemistry and Behavior</u>, 2001, 70, 341-352.
- Persinger, M.A., St-Pierre, L.S., & Koren, S.A. Geophysical Variables and Behavior: XCI. Ambulatory behavior in rats following prenatal exposures to complex magnetic fields designed to interact with genetic expression. <u>Perceptual and Motor Skills</u>, 2001, 92, 183-192.
- Santi, S.A., Cook, L.L., Persinger, M.A., & O'Connor, R.P. Normal spatial memory following postseizure treatment with ketamine: Selective damage attenuates memory deficits in brain-damaged rodents. <u>International Journal of Neuroscience</u>, 2001, <u>107</u>, 63-75.
- Stewart, L.S., Leung, L.S., & Persinger, M.A. Diurnal variation in pilocarpine-induced generalized tonic-clonic seizure activity. <u>Epilepsy Research</u>, 2001, 44, 207-212.
- Stewart, L.S., & Persinger, M.A. Ketamine prevents learning impairment when administered immediately after status epilepticus onset. <u>Epilepsy and Behavior</u>, 2001, <u>2</u>, 585-591.
- Vaillancourt, L.N., & Persinger, M.A. Normalization of spatial learning despite brain damage in rats receiving ketamine after seizure-induction: Evidence or the neuromatrix. <u>Psychological Reports</u>, 2001, 88, 102-110.
- Suess, L.A.H., & Persinger, M.A. Geophysical variables and behavior: XCVI. "Experiences" attributed to Christ and Mary at Marmora, Ontario, Canada may have been consequences of environmental electromagnetic stimulation: Implications for religious movements. <a href="Perceptual and Motor Skills">Perceptual and Motor Skills</a>, 2001, 93, 435-450.

- Jedrzejko, C., & Persinger, M.A. Weight gain in postseized rats is facilitated by adding aspirin, glucose, or glucose-taurine-acetaminophen to food mush. <u>Psychological</u> <u>Reports</u>, 2001, <u>89</u>, 188-190.
- Murphy, T., & Persinger, M.A. Complex partial epileptic-like experiences in university students and practitioners of Dharmakaya in Thailand: Comparison with Canadian university students. <u>Psychological Reports</u>, 2001, <u>89</u>, 199-206.
- Galic, M.A., & Persinger, M.A. Voluminous sucrose consumption in female rats: Increased "nippiness" during periods of sucrose removal and possible oestrus periodicity. <u>Psychological Reports</u>, 2002, <u>90</u>, 58-60.
- Persinger, M.A., Stewart, L.S., Richards, P.M., Harrigan, T., O'Connor, R.P., & Bureau, Y.R.J. Seizure onset times for rats receiving systemic lithium and pilocarpine: Sources of variability. <a href="https://pharmacology.biochemistry">Pharmacology</a>, Biochemistry and Behavior, 2002, 71, 7-17.
- Tiller, S.G., & Persinger, M.A. Geophysical variables and behavior: XCVII. Increased proportions of the left-sided sense of presence induced experimentally by right hemispheric application of specific (frequency-modulated) complex magnetic fields. Perceptual and Motor Skills, 2002, 94, 26-28.
- Persinger, M.A., & Lalonde, C-A. Hemispheric asymmetry (lateralization) in electroencephalographic activity while viewing familiar and unfamiliar patterns from Kimura Figures. <u>International Journal of Neuroscience</u>, 2002, <u>112</u>, 65-79.
- Persinger, M.A., & Tiller, S.G. Intratest and intertest means and reliability of the MMPI-168 for university students and patients referred for neuropsychological assessment. <u>Perceptual and Motor Skills</u>, 2002, 94, 1143-1150.
- Persinger, M.A., Chellew-Bellanger, G., & Tiller, S.G. Bilingual men but not women display less left ear but not right ear accuracy during dichotic word listening compared to monolinguals. <u>International Journal of Neuroscience</u>, 2002, <u>112</u>, 55-63.
- Persinger, M.A., Roll, W.G., Tiller, S.G., Koren, S.A., & Cook, C. M. Remote viewing with the artist Ingo Swann: Neuropsychological profile, electroencephalographic correlates, magnetic resonance imaging (MRI) and possible mechanisms. Perceptual and Motor Skills, 2002, 94, 927-949.
- Roll, W.G., Persinger, M.A., Webster, D.L., Tiller, S.G., & Cook, C.M. Neurobehavioral and neurometabolic (SPECT) correlates of paranormal information: Involvement of the right hemisphere and its sensitivity to weak complex magnetic fields. <u>International Journal of Neuroscience</u>, 2002, 112, 197-224.
- Richards, M.A., Koren, S.A., & Persinger, M.A. Circumcerebral application of weak complex magnetic fields with derivatives and changes in electroencephalographic

- power spectra within the theta range: implications for states of consciousness. <u>Perceptual and Motor Skills</u>, 2002, <u>95</u>, 671-686.
- Persinger, M.A., Cook, C.M., & Tiller, S.G. Enhancement of images of possible memories of others during exposure to circumcerebral magnetic fields: correlations with ambient geomagnetic activity. <u>Perceptual and Motor Skills</u>, 2002, <u>95</u>, 531-543.
- Persinger, M.A. Geophysical variables and behavior: Ambient geomagnetic activity and experiences of "memories": Interactions with gender and implications for receptive psi experiences. <u>Perceptual and Motor Skills</u>, 2002, <u>94</u>, 1271-1282.
- Koren, S. A. & Persinger, M. A. Possible disruption of remote viewing by complex weak magnetic fields around the stimulus site and the possibility of accessing real phase space: a pilot study. <u>Perceptual and Motor Skills</u>, 2002, <u>95</u>, 989-998.
- Duggan, G., Peredery, O., & Persinger, M.A. Effects of acute and repeated stress and onset of skin cancer in mice. <u>Psychological Reports</u>, 2002, <u>95</u>, 953-954.
- Kinoshameg, S.E., & Persinger, M.A. Working memory and reference memory in adult rats following limbic seizures induced at 21 or 90 days of age. <u>Psychological Reports</u>, 2002, <u>91</u>, 729-730.
- Booth, J.N., Charette, J.C., & Persinger, M.A. Ranking of stimuli that evoked memories in significant others after exposure to circumcerebral magnetic fields: correlations with ambient geomagnetic activity. <u>Perceptual and Motor Skills</u>, 2002, <u>95</u>, 555-558.
- Persinger, M. A., Roll, W.G., Tillers, S.G., Koren, S. A. & Cook, C. M. Remote viewing with the artist Ingo Swann: neuropsychological profile, electroencephalographic correlates, Magnetic Resonance Imaging (MRI), and possible mechanisms. <u>Perceptual and Motor Skills</u>, 2002, 94, 927-949.
- Persinger, M.A., & Healey, F. Experimental facilitation of the sensed presence: possible intercalation between the hemispheres induced by complex magnetic fields. <u>Journal of Nervous and Mental Diseases</u>, 2002, **190**, 533-541.
- Persinger, M. A. & St-Pierre, L. S. The brain matrix and multifocal brain damage following a single injection of ketamine in young adult rats: conspicuous changes in old age. <u>Perceptual and Motor Skills</u>, 2002, 95, 897-900.
- McKay, B.E., & Persinger, M.A. Complex magnetic fields potentiate agmatine-mediated contextual fear learning deficits in rats. <u>Life Sciences</u>, 2003, <u>72</u>, 2489-2498.
- McKay, B.E., St-Pierre, L.S., & Persinger, M.A. Radial maze proficiency of adult Wistar rats given prenatal complex magnetic field treatments. <u>Developmental Psychobiology</u>, 2003, <u>42</u>, <u>1-8</u>.

- Persinger, M.A. Rats' preferences for an analgesic compared to water: an alternative to "killing the rat so it does not suffer". <u>Perceptual and Motor Skills</u>, 2003, <u>96</u>, 674-680.
- Persinger, M. A. The sensed presence within experimental settings: implications for the male and female concept of self. <u>The Journal of Psychology</u>, 2003, 137, 5-16.
- Persinger, M.A. A brief (one hour) quantitative neuropsychological assessment with three performance-based tests: strong concordance with proficiency scores for a more extensive test battery. <u>Perceptual and Motor Skills</u>, 2003, <u>96</u>, 647-652.
- Martin, L. J., & Persinger, M. A. Spatial heterogeneity not homogeneity of the magnetic field during exposures to complex frequency-modulated patterns facilitates analgesia. <u>Perceptual and Motor Skills</u>, 2003, <u>96</u>, 1005-102.
- Baker-Price, L. & Persinger, M. A. Intermittent burst-firing weak (1 microTesla) magnetic fields reduce psychometric depression in patients who sustained closed head injuries: a replication and electroencephalographic validation. <u>Perceptual and Motor Skills</u>, 2003,96, 965-974.
- McKay, B. E., Koren, S. A. & Persinger, M. A. Behavioral effects of combined perinatal L-Name and 0.5 Hz magnetic field treatments. <u>International Journal of Neuroscience</u>, 2003, <u>113</u>, 119-139.
- Persinger, M. A., Koren, S. A, & Tsang, E. W. Enhanced power within a specific band of theta activity in one person while another receives circumcerebral pulsed magnetic fields: a mechanism of influence at a distance? Perceptual and Motor Skills, 2003, 97, 877-894.
- Booth, J. N., Koren, S. A., & Persinger, M. A. Increased proportions of sensed presences and occipital spikes with 1- and 10-msec point durations of continuous 7-Hz transcerebral magnetic fields. <u>Perceptual and Motor Skills</u>, 2003, 97, 951-952.
- McKay, B.E., & Persinger, M.A. Conditioned taste aversion is not disrupted in rats exposed to weak, complex magnetic fields during the CS-UCS interval. <u>Perceptual and Motor Skills</u>, 2003, 97, 1335-1338.
- Lado, W. E., & Persinger, M. A. Mechanical impacts to the skulls of rats produce specific deficits in maze performance and weight loss: evidence for apoptosis of cortical neurons and implications for clinical neuropsychology. <u>Perceptual and Motor Skills</u>, 2003, 97, 115-1127.
- Sculthorpe, L., & Persinger, M. A. Does phase-modulation of applied 40 Hz transcerebral magnetic fields affect subjective experiences and hypnotic induction? <u>Perceptual and Motor Skills</u>, 2003 97, 1031-1037.

- Hill, D. R. & Persinger, M. A. Application of transcerebral, weak (1 microT) complex magnetic fields and mystical experiences: are they generated by field-induced dimethyltryptamine release from the pineal organ? Perceptual and Motor Skills, 2003, 97, 1049-1050.
- Persinger, M. A. Weak-to-moderate correlations between daily geomagnetic activity and reports of diminished pleasantness: a nonspecific source for multiple behavioral correlates? <u>Perceptual and Motor Skills</u>, 2004, 98, 58-60.
- Richards, P.M., & Persinger, M.A. Agility, agnosia, and graphaesthesia for toes and fingers in children: normative data (7 to 14 years) and clinical comparisons, International Journal of Neuroscience, 2004, 114, 17-29.
- Fitzpatrick, R. E., & Persinger, M. A. Weekly treatments with a burst-firing magnetic field alters behavior in the elevated plus maze after two sessions. <u>Perceptual and Motor Skills</u>, 2004, 98, 983-984.
- Galic, M. A. & Persinger, M. A. Geomagnetic activity during the previous day is correlated with increased consumption of sucrose during subsequent days: is increased geomagnetic activity aversive? Perceptual and Motor Skills, 2004, 98, 1126-1128.
- Fournier, N. M. & Persinger, M. A. Geophysical variables and behavior: C. Increased geomagnetic activity on days of commercial air crashes attributed to computer or pilot error but not mechanical failure. Perceptual and Motor Skills, 2004, 98, 1219-1224.
- Martin, L. J., Koren, S. A. & Persinger, M. A. Thermal analgesic effects form weak, complex magnetic fields and pharmacological interactions. <u>Pharmacology, Biochemistry and Behavior</u>, 2004, 78, 217-227.
- Persinger, M. A. & Dupont, M. J. Emergence of spontaneous seizures during the year following lithium/pilocarpine-induced epilepsy and neuronal loss within the right temporal cortices. <u>Epilepsy and Behavior</u>, 2004, 5, 440-445.
- McKay, B.E., & Persinger, M.A. Lithium ion "cyclotron resonance" magnetic fields decrease seizure onset times in lithium-pilocarpine seized rats: a nonlinear intensity effect. <u>International Journal of Neuroscience</u>, 2004, 114, 1035-1045.
- Tsang, E. W., Koren, S. A. & Persinger, M. A. Power increases within the gamma range over the frontal and occipital regions during acute exposures to cerebrally counterclockwise rotating magnetic fields with specific derivatives of change. International Journal of Neuroscience, 2004, 114, 1183-1193.
- McKay, B. E. & Persinger, M. A. Normal spatial and contextual learning for ketamine-

- treated rats in the pilocarpine epilepsy model. <u>Pharmacology, Biochemistry and Behavior</u>, 2004, 78, 111-119.
- Martin, L. J., Koren, S. A. & Persinger, M. A. Influence of a complex magnetic field application in rats upon thermal nociceptive thresholds: the importance of polarity and timing. <u>International Journal of Neuroscience</u>, 2004, 114, 1259-1276.
- Marin, L. J. & Persinger, M. A. Thermal analgesia induced by 30-min exposure to 1 microTesla burst-firing magnetic fields is strongly enhanced in a dose-dependent manner by the alpha-2 agonist clonidine in rats. <u>Neuroscience Letters</u>, 2004, 366, 226-229.
- Fournier, N. M. & Persinger, M. A. The neuromatrix and the epileptic brain: behavioral and learning preservation in limbic epileptic rats treated with ketamine but not acepromazine. <u>Epilepsy and Behavior</u>, 2004, 5, 119-127.
- Persinger, M.A. Perceived dangerousness to public safety of paraphrases from The Koran, New Testament, Book of Mormon, Tibetan Book of the Dead and Egyptian Book of the Dead. <u>Psychological Reports</u>, 2004, in press.
- Peredery, O., & Persinger, M. A. Herbal treatment following post-seizure induction in rat by lithium pilocarpine: Scutellaria lateriflora (SCULLCAP), Gelsemium sempervirens (GELSEMIUM) and Datura stramonium (JIMSON WEED) may prevent development of spontaneous seizures. <a href="Phytotherapy Research">Phytotherapy Research</a>, 2004, 18, 700-705.
- Dupont, M. J., McKay, B. E., Parker, G., & Persinger, M. A. Geophysical variables and behavior: XCIX. Reductions in numbers of neurons within the parasolitary nucleus in rats exposed perinatally to a magnetic pattern designed to imitate geomagnetic continuous pulsations: implications for Sudden Infant Death. <a href="Perceptual and Motor Skills">Perceptual and Motor Skills</a>, 2004, 98, 958-966.
- Kinoshameg, S. A. & Persinger, M. A. Suppression of experimental allergic encephalomyelitis in rats by 50 nT, 7 Hz amplitude-modulated nocturnal magnetic fields depends on when after inoculation the fields are applied. <a href="Neuroscience-Letters">Neuroscience Letters</a>, 2004, 370, 166-170.
- Persinger, M.A., O'Donovan, C.A., McKay, B. E., & Koren, S. A. Sudden death in rats exposed to nocturnal magnetic fields that simulate the shape and intensity of sudden geomagnetic activity. <u>International Journal of Biometeorology</u>, 2005, 49, 256-261.
- Dupont, M. J., Parker, G., & Persinger, M. A. Reduced litter sizes following 48-hr of prenatal exposure to 5 nT to 10 nT, 0.5 Hz magnetic fields: implications for sudden infant deaths. <u>International Journal of Neuroscience</u>, 2005, 115, 713-715.

- Booth, J. C., Koren, S. A., & Persinger, M. A. Increased feelings of the sensed presence and increased geomagnetic activity at the time of the experience during exposures to transcerebral weak complex magnetic fields. <u>International Journal of Neuroscience</u>, 2005, 115, 1039-1065.
- McKay, B. E. & Persinger, M. A. Complex magnetic fields enable static magnetic field cue use for rats in radial maze tasks. <u>International Journal of Neuroscience</u>, 2005, 115, 625-648.
- Persinger, M. A. & Koren, S. A. A response to Granqvist et al "Sensed presence and mystical experiences are predicted by suggestibility, not by application of transcranial weak magnetic fields" <u>Neuroscience Letters</u>, 2005, 308, 346-347.
- St-Pierre, L. S., & Persinger, M. A. Extreme obesity in one year old female rats in which seizures were induced before puberty by lithium/pilocarpine followed by a single injection of acepromazine. <u>Epilepsy and Behavior</u>, in press.
- Martin, L. J. & Persinger, M. A. Thermal analgesic effects from weak (1 microT), complex magnetic fields: critical parameters. <u>Electromagnetic Biology and Medicine</u>, in press
- Martin, L. J. & Persinger, M. A. The influence of various pharmacological agents on the analgesia induced by an applied complex magnetic field treatment: a receptor system potpourri. <u>Electromagnetic Biology and Medicine</u>, in press.
- St-Pierre, L. S. & Persinger, M. A. Experimental facilitation of the sensed presence is predicted by specific patterns of applied magnetic fields not be suggestibility: reanalyses of 19 experiments. <u>International Journal of Neuroscience</u>, in press.
- Galic, M. A. & Persinger, M. A. Sucrose ingestion decreases seizure onset time in female rats treated with lithium and pilocarpine. <u>Epilepsy and Behavior</u>, in press.
- Persinger, M. A. A potential multiple resonance mechanism by which weak magnetic fields affect molecules and medical problems: the example of melatonin and experimental "multiple sclerosis". <u>Medical Hypotheses</u>, in press.
- St-Pierre, L. S. & Persinger, M. A. Ambulatory effects of brief exposures to magnetic fields changing orthogonally in space over time. <u>International Journal of Neuroscience</u>, in press.
- Delparte, J. J. & Persinger, M. A. Brief exposures to theta-burst magnetic fields impair the consolidation of food-induced conditioned place preference. <u>International Journal of Neuroscience</u>, in press.
- Persinger, M. A. Confounding variables within "referral controls" for children wit histories

- of sexual stimulation by adults: implications for erroneous attributions from "childhood sexual abuse". Social Behavior and Personality, in press.
- McKay, B. E., & Persinger, M. A. Weak, physiologically relevant magnetic fields disrupt maze performance in seized rats normalized with ketamine: possible support for the neuromatrix concept?, <u>Epilepsy and Behavior</u>, in press.

### In submission:

- St-Pierre, L. S., Mazzuchin, A. & Persinger, M. A. Behavioral, blood chemical, and hippocampal histomorphological differences in adult rats exposed prenatally to physiologically-patterned weak magnetic fields.
- St-Pierre, L. S. & Persinger, M. A. Behavioral consequences of prenatal exposure to complex weak magnetic fields in rats.
- Lado, W. E. & Persinger, M. A. Weight loss in rats following a single impact of mechanical energy to the skull is not related to presence or absence of post-impact consequences.
- Lado, W. E. & Persinger, M. A. Behavioral and histomorphological changes in rats from a single impact of low intensity ("stunning") mechanical energy: implications for mild head injuries.
- Persinger, M. A., Lado, W. E. & Martin, L. J. Amelioration of histomorphological changes in the cerebral cortices following mild head trauma by weak complex-sequence magnetic fields.
- Tsang, E. W. & Persinger, M. A. Electrophysiological and psychometric measures during five consecutive days of Murphy's Shakti-a cerebrally asymmetric magnetic field stimulation.
- Tsang, E. W., Koren, S. A. & Persinger, M. A. Weekly vs daily treatments with specific weak, transcerebral complex magnetic fields is more effective for decreasing psychometric depression in normal volunteers.
- Persinger, M. A. A simple estimates of the mass of the universe: is it a black hole?
- Persinger, M.A. Responses to successive statements that refute the existence of God: Implications for belief in God as a "cognitive virus", <u>Religion</u>, submitted
- Charette, J. C. & Persinger, M. A. One minute of anoxia from carbon dioxide during infancy in Rattus norvegicus affects adult learning and produces subtle changes in the pattern of neuronal soma in the hippocampus.

- Persinger, M. A. & Baker-Price, L. Partial entrainment of Stage 2 sleep spindles by weak, burst-firing transcerebral magnetic stimulation in a woman with a mild head injury.
- Tiller, S.G., & Persinger, M.A. Test-retest reliability and cross sectional evaluation of neuro-psychological impairments one to four years postinjury.
- Law, K.-M., Parker, G., & Persinger, M.A. Cadmium in the water supply: Effects on renal histopathology and the Cd content within the kidneys of mice.
- Persinger, M.A. Differential density of foci of lymphocytes within the brains of Lewis rats displaying experimental allergic encephalomyelitis: effects of weak, complex magnetic fields.
- O'Donovan, C.A., Long, T.J., & Persinger, M.A. Geomagnetic activity and numbers of seizures occurring during VEEG.
- e) Articles (in non-refereed journals): N/A
- Koren, S.A., & Persinger, M.A. Analyses of the Aum Shinrikyo "Brain Stimulation Device." 15 August 1997.
- Persinger, M.A. The Ingo Swann Visit, August 1998: Raw Data, Analyses and Discussions.

Persinger, M. A. Science and the resurrection. Skeptic, 2002, 9, 76-79.

- f) Book Reviews: N/A
- q) Published Conference Proceedings: See (h)

### h)Patents

- Thomas, A.W., Prato, F., Kavaliers, M., & Persinger, M.A. Application No. 60/019,184 (U.S.A.), "Electrotherapy Device using Low Frequency Magnetic Pulses," Filing Date: 6 June, 1996. U.S. Patent 6, 234, 953 issued 22 May 2001.
- Koren, S., & Persinger, M.A. Provisional Patent Application No. 2,214,296. Series No. 2214296, "Apparatus for Generating Electromagnetic Waveforms," Filing Date, 29 August, 1997. U.S. Patent Application No. 09/141, 752. U.S. Patent 6, 312, 376 issued November 6, 2001.

## ha) Clinical Trials

via NeuroScience Industries, C-N Chu and Curt Paulson, CEO, NeuroScience Industries, San Francisco, CA in Taiwan for testing analgesic effects of SAM 360 potential trials beginning in Sweden and Mexico to test the efficacy of affecting brain function by transcerebral complex magnetic fields.

- i) <u>Presentations at academic/professional conferences, societies, workshops:</u>
- Halasz, M.F., Hughes, K.R., Humphreys, D.R., & Persinger, M.A. Radiogenic cerebellar malformation: Elicitation of behavioral transients to unmask compensated deficits of operant learning in rats. (<u>American Zoologist</u>, 1970, <u>10</u>, 33).
- Persinger, M.A. Some behavioral and physiological effects of pre- and neo-natal exposure to an ELF rotating magnetic field. Sixth International Biometeorology Conference in Noordwijk, The Netherlands, 3-9 September, 1972.
- Persinger, M.A. ELF, thermoelectric and tectonogenic sources of PSI and PK. First Canadian Conference of Psychokinesis, Toronto, Canada, 20-23 June, 1974. (New Horizons, 1, 1975).
- Persinger, M.A. Electromagnetism, field forces, and human activity. Eighth Annual Meeting of the Canadian Archaeological Association, Thunder Bay, Ontario, Canada, 6-9 March, 1975.
- Persinger, M.A. Behavioral-biological-biochemical consequences of ELF magnetic field exposures. First Canadian Symposium on the Behavioral-Biological Effects of Extremely Low Frequency Electromagnetic Fields. The 36<sup>th</sup> Annual Meeting of the Canadian Psychological Association, Quebec City, Canada, 18-20 June, 1975.
- Persinger, M.A. Comments on transient seismo-electric/magnetic fields and proximal human behavior. The 7<sup>th</sup> International Biometeorology Congress, College Park, Maryland, U.S.A., 17-23 August, 1975. (Abstract in <u>International Journal of Biometeorology</u>, Supplement to 1975, <u>19</u>, 125-126).
- Persinger, M.A., & Janes, J.T. Significant correlations between anxiety scores and perinatal geomagnetic activity. The 7<sup>th</sup> International Biometeorology Congress, College Park, Maryland, U.S.A., 17-23 August, 1975 (Abstract in <u>International Journal of Biometeorology</u>, Supplement to 1975, <u>19</u>, 126).
- Persinger, M.A., & Lafrenière, G.F. Relative hypertrophy of rat thyroid following ten-day exposures to an ELF magnetic field: Determining intensity thresholds. The 7<sup>th</sup> International Biometeorology Congress, College Park, Maryland, U.S.A., 17-23 August, 1975. (Abstract in <u>International Journal of Biometeorology</u>, Supplement to 1975, 19, 126-127.

- Persinger, M.A. Modifications of brain mast cell numbers in rats by various preweaning treatments. International Society for Developmental Psychobiology. Toronto, Ontario, 5-7 November, 1976.
- Persinger, M.A. Response sensitivity of human subjects to ELF electromagnetic fields: critical considerations for two ELF models of paranormal behaviours. Proceedings of the International Conference on Cybernetics and Society (IEEF Systems, Man and Cybernetics Society), Washington, D.C., U.S.A., 19-21 September, 1977.
- Persinger, M.A. What factors can account for UFO experiences? American Psychological Association, Symposium on Using Hypnotic Procedures in the Investigation of UFO Experiences, Toronto, Ontario, Canada, 28 August, 1978.
- Persinger, M.A. Predicting UFO events and experiences. Presented to the Toronto Society for Psychical Research, October, 1981.
- Persinger, M.A. The problems of human exposure to ELF magnetic fields. Keynote Address. PACE Conference. Learned Societies. Ottawa, Ontario, Canada, June 1982.
- Persinger, M.A. Predicting UFO events and experiences. Invited Paper at MUFON Symposium, 2-5 July, 1982, Toronto, Ontario.
- Persinger, M.A. Some effects of cold climate upon behavior. Presented at the Workshop "Making Canadian Cities More Liveable". Ottawa, Ontario, 28 October, 1982.
- Persinger, M.A. Winter climate and the Canadian personality. The factors. Invited Paper at the Symposium "To Dome or Not to Dome". Part of the New Neighbourhood Forum sponsored by Ministry of Municipal Affairs, Toronto, Ontario, 2-5 February, 1983.
- Persinger, M.A., & Schaut, G.B. (presenter). Intense subjective experiences occur during days of quiet, global geomagnetic activity. Presented at the 100<sup>th</sup> year Anniversary of the American Society for Psychical Research: The 28<sup>th</sup> Annual Convention of the Parapsychological Association), 12-16 August, 1985, Tufts University, Medford, MA.
- Derr, J.S. (presenter) & Persinger, M.A. Luminous phenomena, earthquake lights and tectonic strain. Presented at the 4<sup>th</sup> Annual Meeting of the Society for Scientific Exploration (Princeton University, October 29-31, 1985).
- Derr, J.A. (presenter) & Persinger, M.A. Temporal association between Zeitoun luminous phenomena and regional seismic activity. Society for Scientific Exploration. Sixth Annual Meeting (Austin, Texas), 29-30 May, 1987.
- Persinger, M.A. Global geomagnetic activity and anomalous psychological experiences

- concerning death and crisis: further replications. Society for Scientific Exploration. Sixth Annual Meeting (Austin, Texas), May 29-30, 1987.
- Derr, J.S. (presenter), & Persinger, M.A. Luminous phenomena (earthquakes lights?) preceding two New Mexico earthquakes. Presented at the Eastern Section Seismological Society of America Conference (Santa Fe, New Mexico), April 13-15, 1992. Seismological Research Letters, 63(1), January-March, 1992.
- Persinger, M.A. Human memory: What it is and why it changes over time. Presented at The Ontario Family Law Judges Association, Deerhurst, Ontario, May 24, 1995.
- Persinger, M.A. Human memories: An introduction to current scientific evidence and comments concerning problems of memory reconstruction. Presented at Northern Regional Judicial Seminar, Sault-Ste-Marie, Ontario, February 22, 1996.
- Long, T., O'Donovan, C., Cabe, C., Bennett, L., Whittington, P., Bell, W., & Persinger, M.A. Relationship of daily geomagnetic activity to the occurrence of temporal lobe seizures in an epilepsy monitoring unit. Presented at American Epilepsy Society, May 1996. Abstract published in <u>Epilepsia</u>, 1996, <u>36</u>(S4), 94.
- Choleris, E., Persinger, M.A., Thomas, A.W., Kavaliers, M., Ossenkopp, K.P., & Prato, F.S. The effects of a specific pulsed extremely low frequency magnetic field on conditioned taste aversion in rodents. P-88-A. Presented (by A. Thomas) at the Second World Congress for Electricity and Magnetism in Biology and Medicine. June 8-13, 1997, Bologna, Italy, p. 221.
- Persinger, M.A. The limbic brain and forensic dilemmas. Presented at the Forensic Police Conference, Sudbury, Ontario (Four Points Hotel), 25 September, 1998.
- Persinger, M. A. The God of mind or the Mind of God? Humanist Society, Toronto, June 2002. (portions published in Humanist in Canada, Winter 2002-2003, pp. 8-10,19.
- Persinger, M. A. Complex, weak magnetic fields as powerful biological stimuli: correlational data and experimental simulation. Seminar Series, Guelph University, February, 2003.
- Persinger, M. A. Effects of weak complex magnetic fields (nanoTesla) on mortality in mice following injections of melanoma cells. Cancer Research Seminars. Northeastern Ontario Cancer Research Center, 16 May 2003.
- Martin, L.J., Persinger, M. A. Waveform-specific intensity dependent and time limited efficacy of magnetic fields for analgesia in the male Wistar rat. Society for Neuroscience, Program No. 238.7, New Orleans, LA., 2003.
- Persinger, M. A. Modulation of chemically-induced tumorigenesis by nocturnal

- application of weak complex magnetic fields that simulate geomagnetic activity. Northeastern Ontario Cancer Research Center, November 2003.
- Persinger, M. A. Behavioral and histomorphological consequences of neuronal death. Cancer Research Seminars. Northeastern Ontario Cancer Research Center, December, 2004.
- Dupont, M. J., Charette, J. C., Parker, G. H., St-Pierre, L. & Persinger, M. A. Experimental simulation of the geomagnetic activity correlated with sudden infant death in rat pups and histomorphological changes. SIDS International Conference. 2-6 July, 2004, Edmonton, Alberta.
- Martin, L. J., Lafrenie, R. M., Persinger, M. A. Variable exposure durations to a weak (microTesla) frequency-modulated magnetic pattern activates MAPK, ERK-1, and ERK-2 pathways which results in different thermal analgesic responses that can be increased with preinjections of morphine or agmatine. Society for Neuroscience, Program No. 718.5, San Diego, CA., 2004.
- Galic, M. A., Fournier, N.M., Martin, L. J. and Persinger, M. A. Anticonvulsant action from a 10-min swim stress on behavioral convulsions induced through lithium and pilocarpine. Society for Neuroscience, Program No. 451.15. San Diego, CA., 2004.
- Persinger, M. A. Recent developments in behavioral neuroscience: implications for legal concepts of intention and impulsive acts. Northern Ontario Judges Conference, May, 2005.

### Research Contracts:

1983 U.S. Navy, Surface Weapons Research Branch:Magnetic Field Effects on Mast Cell Degranulation: \$10,000

1985-86 Prognostication of rock bursts from micro seismographic patterns CIMMER: \$25,000

1999-2001 Weak transcerebral magnetic fields as treatments for depression following brain injury: Clinical trials (Network North): \$15,000

# a) Community Contributions

- -Research covered in the following magazines: <u>Omni, Psychology Today, Newsweek</u> (Japan), <u>Equinox, MacLean's Magazine, New York Times Magazine, Wired, Newsweek</u> (U.S.A.), <u>Reader's Digest, Discover, New Scientist, Saturday Night</u>.
- -Research covered (via telephone interviews) in major newspapers from: England, Scotland, Sweden, Denmark, Japan, France, U.S., Canada, Germany, The

- Netherlands, Italy, Chile, Australia, New Zealand, Portugal, and Turkey.
- -Guest on approximately seventy TV and ratio shows concerning scientific aspects of various paranormal events (1974-86).
- -Since 1986 I have appeared on "NOVA", ABC's "20/20", ABC's "NightLine," "60 Minutes" (Australia), "That's Incredible," "48 Hours" (CBS), Unsolved Mysteries, The Discovery Channel, UltraScience, MTV News Special, The Unexplained, CNN News, NBC News, The Learning Channel, Arts and Entertainment Channel, Japanese T.V. We have been filmed by approximately 150 different groups of television journalists or writers within the last 15 years. (List of most interviews is available).
- -Registered Psychologist, Ontario (since 1987). Specialty: Neuropsychology; Clinical Psychology; Practice in Neuropsychology

# l) Other Scholarly Activity Representing a Contribution to the Discipline:

- -Member of the Editorial Board for the Journal of Research in PSI Phenomena (1976-78)
- -Member of Editorial Board for Journal of Bioelectricity. Have refereed articles for the following journals: Science; Physiology and Behavior; Perceptual and Motor Skills; Psychological Psychopharmacology; Developmental Psychobiology; Reports; Scandinavian Journal of Work, Environment and Health; Pharmacology, Biochemistry and Behavior; Journal of Nervous and Mental Disease; Brain Research Bulletin; Personality and Individual Differences; Epilepsy Research; Neuroscience Letters; Journal Neurochemistry; Brazilian Journal of Medical and Biological Research; Journal of Comparative Psychology; Epilepsy and Behavior
- -Organized first Canadian Symposium concerning the bio-behavioral effects of extremely low frequency electromagnetic fields, Quebec City, C.P.A., 1975
- -Special Consultant to the Committee on Biosphere Effects of ELF Radiation of the Assembly of Life Sciences, Division of Medical Sciences, Washington, D.C., U.S.A. (1976-77)
- -Technical Consultant in Psychology and Electromagnetic Field Effects for Aerial Phenomena Research Organization (A.P.R.O.), Tucson, Arizona, U.S.A. (1975-77)
- -Member of Scientific Advisory Board for Society for the Investigation of the Unexplained (1978-86)
- -Member of Scientific Advisory Panel for Evaluation of Potential Medical Hazards from Overhead 765 KV Transmission Lines for the State of New York (1980-1984)
- -Member of Board of Sudbury Head Injury Association (1992-1999)

### 8. **CURRENT RESEARCH PROJECTS**

- -Discerning potential effects of complex, weak intensity magnetic fields for producing and treating specific cancers.
- -Quantitative (cell count) measurements of the aberrant neuroanatomical pathways of sudden infant deaths in rats and humans associated with pcl geomagnetic patterns and nitric oxide.
- -Long term neuroanatomical and behavioral effects of 1 min of exposures to carbon

- dioxide, nitrogen gas, or vacuum during infancy and childhood in the rat.
- -Determining the mechanisms of persistent excessive sucrose consumption (200 cc/day) in the rat.
- -Determination of neuronal apoptosis and necrosis in impact and countercoup areas in the rat brain following single mechanical impacts to the skull without loss of "consciousness"--potential treatments
- -Isolation of electromagnetic sequences that stimulate gene expression.
- -Modifying the interval between successive 20 msec recreations of consciousness and time experience.
- -Behavioral and neuroimmunological correlates of seizure-induced brain damage within the rat.
- -Neurocognitive and personality changes in people with enhanced temporal lobe signs.
- -Thalamic fine-structure connection by factor analyses and canonical correlation of nuclear necrosis and histochemical determinations.
- -Modelling and testing of the tectonic strain model for luminous phenomena and seismicity.
- -Simulation of near-death experiences, mystical experiences, and altered states of consciousness by exposure to complex, weak transcerebral magnetic fields.
- -Isolating and evaluating the fundamental electromagnetic algorithms for brain stimulation as substitutes or adjuncts to drug treatment for depressed and chronic pain patients.

## 9. MEMBERSHIP AND CONTRIBUTION IN PROFESSIONAL ORGANIZATIONS

- 1. Member of Executive of the Sudbury Advisory Committee for Head Injury (1988-1999)
- 2. Member of the following organizations: American Society for the Advancement of Science; Neuroscience Society; Ontario Psychological Association

## 10. a. **DOCTORAL DISSERTATION SUPERVISION**

**Linda St-Pierre** (Zoology)Complex magnetic fields and development Via Guelph University: 2001-present

Rolland Chrétien (Psychology)Prefrontal lobe indicators differentiate young offenders from normal teenagers Via Ottawa University: 1993-1997

## 10. b. **MASTER THESIS SUPERVISION (Primary Supervisor)**

**Debby Meades**: Aging, brain, and behavior..2005-present **Phil Evans**: Mild head injury and mechanisms..2005-present

Vivien Hoang: Experimental brain injury and treatment..2005-present Paul Whissell: Magnetic fields and development...2005-present

Jude Delparte: Complex magnetic fields and learning.. 2003-present

Jing Hu: Magnetic fields and neoplastic histology.. 2003-present Quoc Hao Mach: Basic algorithms of AI in biological systems..2002-present Michael Galic: Sucrose-hormonal effects in female rats..2002-2005 Loren Martin: Complex magnetic fields and analgesia....2002-2004 Wudu Lado: Closed head injury and novel treatments in the rat.. 2002-2005 Julie Charette: Early anoxia, hippocampus, and behavior.. 2002-present Mathieu Dupont: SIDS related magnetic patterns and cell density.. 2002-2005 Nicholas Booth: Complex magnetic fields and consciousness..2002-present: Eric Tsang: Complex EM therapy and EEG/physiological measures.. 2001-2004 Samantha Kinoshameg: EAE and geomagnetic-type stimulations..2000-2003 Bruce McKay: Complex magnetic field synergisms with drugs.. 1999-2001 Linda St-Pierre: Prenatal exposures to complex magnetic fields.. 1998-2001 Linda Vaillancourt: Maternal behavior and brain damage.. 1998-2002 Tracy Bergeron: Sense of self and brain laterality.. 1998-present Rod O'Connor: Sudden Infant Death and magnetic fields.. 1997-2001 Lee Stewart: Excitotoxicity and brain injury .. 1997-2000 Timothy Rico: Blood chemistry and histology of epileptic rats.. 1997-present Guylaine Chellew: Cardiac aperiodicity and neuropsychology 1997-present Carolyn Djaferis: Families and patients after closed head injury 1995-present Laura Baker: Nagnetic fields and brain injury depression.. 1996-2005 Charles Cook: Developmental aspects of consciousness.. 1997-2000 Lisa Cook: Experimental multiple sclerosis.. 1996-1999 Cynthia Renton: Neurocognitive features of PMS patients.. 1995-present Dawn Desjardins: Aggressive behavior and brain in rats: 1995-1998 Sandra Tiller: Neuropsychological tests and acquired brain injury: 1996-1999 Barbara Hein: Cognitive style and interests in science students: 1993-98 Pauline Richards: Ontogeny of Toe Agnosia and Graphaesthesia: 1992-94 Yves Bureau: Hypothermia and epileptic-induced brain damage: 1992-94 Susan Fisher: Neuropersonality changes following concussion: 1990-93 Carol Bisson: Brain tumor incidence in Northern Ontario:1992-95 Oksana Peredery: Oral cadmium and severity of limbic seizure damage: 1991-94 Pat Kaija: MMPI profile of adolescent substance abusers: Withdrew Drew Moulden: Ontogeny of dichotic listening: 1991-93 Ross Skirda: Religious/Paranormal beliefs and dichotic processing: 1991-92 Ka-mee Law: Oral Cd and kidney histochemistry and pathology: 1987-89 Anna-Maria Santi: Psychosocial discriminators of gifted children: 1986-87 Chris Blomme: Magnetic field detection by pigeons: 1986-88 Jackie Stanley: Humoral immunological response of the rat: 1985-86

\*bold indicates current students

Patricia Lepage: Nickel deposition in fowl within Ontario: 1984-85

Before 1980, about 8 M.Sc.s in Chemistry and Biology.

## 11. RESEARCH GRANTS

2004: Canadian Foundation for Study of Infant Deaths: \$26,000.

2000-2001: BIAL Foundation: Complex magnetic fields Psi and consciousness: \$40,000

2000-2001: Canadian Foundation for study of infant deaths

(Dr. S. Segal Research Grants): 30,000

1989-89: Internal - Micromorphology of seizure damage: \$19,000 1988-89: (Research Excellence Award) - Epilepsy Research: \$13,500

1975 through 2002: L.U. (internal NSERC) - Primarily brain morphology,

electrical patterns and behavior in rats and humans: \$47,000

1973-74: (Shared with Falter): President's Fund \$10,000

## 12. ACADEMIC/PROFESSIONAL AWARDS, PRIZES:

Laurentian University Research Excellence Award 1989 Sudbury Regional Brain Injury Association Lifetime Membership Award 2001

# 13. OTHER ACTIVITIES WHICH ARE NOT OTHERWISE LISTED ABOVE

My personal funding from my salary of research publications, supplies, and staff ranges between \$15,000 to \$20,000 annually

## 14. LIST OF COURSES AND NUMBERS OF TIMES COURSES HAVE BEEN TAUGHT

Brain and Behavior: 34

Behavioral Neurobiology: 16

Theories of Learning: 5

Introduction to Psychology: 34

Fourth Year Thesis: 27

Advanced Human Neuroanatomy: 14 Parallel Patterns of the Sciences: 4

Advanced Memory Mechanisms (Consciousness): 11

Experimental Parapsychology: 4

Biometeorology: 4

Clinical Neuropsychology: 16

Graduate Design and Methods of Analysis: 17 (Biology)

Graduate Design and Methods of Analysis: 11 (Child and Human Development)

Motivation and Emotion: 10 Neuropharmacology: 7

Current Developments in the Neurosciences: 8

Clinical and Counselling Psychology: 5