Curriculum Vitae

Leah A. Krubitzer, Ph.D.

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Center for Neuroscience
University of California, Davis
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University of California, Davis
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134 Young Hall
Davis, CA 95616

Personal

Date of Birth: March 30, 1961
Place of Birth: Wilkes-Barre, Pennsylvania USA

Education

1983 **B.S.**
Speech Pathology, High Honors
Pennsylvania State University, University Park, PA

1984 – 1989 **Ph.D.**
Psychology (Neuroscience), Thesis Adviser: Dr. Jon H. Kaas
Vanderbilt University, Nashville, TN

Professional Appointments and Experience

1989 – 1990 **Postdoctoral Fellow** with Dr. Jon H Kaas
Vanderbilt University, Nashville, TN, USA

1990 - 1992 **ARC Research Associate**. Postdoctoral advisor: Dr. Mike Calford.
Vision, Touch and Hearing Research Centre, Department of Physiology and Pharmacology
University of Queensland, Brisbane, Australia

1993 – 1995 **ARC Research Fellow**
Vision, Touch, and Hearing Research Centre, Department of Physiology and Pharmacology
University of Queensland, Brisbane, Australia

1995 – 1998 **Assistant Professor**
Department of Psychology, and Center for Neuroscience
UC Davis, Davis, CA, USA

1999 – 2001 **Associate Professor III**
Department of Psychology, and Center for Neuroscience

UC Davis, Davis, CA, USA

2001 – 2003 **Professor I**
Department of Psychology, and Center for Neuroscience
UC Davis, Davis, CA, USA

2003 – 2006 **Professor II**
Department of Psychology, and Center for Neuroscience
UC Davis, Davis, CA, USA

2006 – 2008 **Professor III**
Department of Psychology, and Center for Neuroscience
UC Davis, Davis, CA, USA

2008 – 2011 **Professor V**
Department of Psychology, and Center for Neuroscience
UC Davis, Davis, CA, USA

2011 – 2013 **Professor VI**
Department of Psychology, and Center for Neuroscience
UC Davis, Davis, CA, USA

2014 – **Professor VII**
Department of Psychology, and Center for Neuroscience
UC Davis, Davis, CA, USA

Honors and Awards

1987 Kreig Cortical Scholar Award, Cajal Club

1996 Herrick Award, American Association of Anatomists

1998 MacArthur Award, MacArthur Foundation

1999 Special Lecture for the Society for Neuroscience meeting

2002 – 2003 The James McKeen Cattell Sabbatical Fellowship

2002 – 2003 Bloedel Visiting Scientist Fellowship, University of Washington

2007 Center for Academic Research ad Training in Anthropogeny (inducted member)

2011 Distinguished Alumni Award, Vanderbilt University

2012 Dean's Innovation Award, Division of Social Sciences, University of California, Davis

2014 International Neuropsychological Symposium (inducted member)

Grant Support

1986 Travel Award for College on the Organization of the Brain, International Centre for Theoretical Physics, Trieste, Italy

1987 – 1989 Predoctoral Fellowship "Organization of neocortex in a primate." NIMH. PI: Leah

	Krubitzer
1987	Travel Award for the IBRO Second World Congress of Neuroscience, Budapest, Hungary, Society for Neuroscience
1989	NIH Postdoctoral Fellowship "Developmental influences on retinogeniculate axon arbors." Massachusetts Institute of Technology, Cambridge, MA, USA (declined)
1993 - 1997	ARC Research Fellowship "A comparative study of the organization and connections of neocortex in Australian mammals." PI: Leah Krubitzer, R VTHRC ARF 9 94.
1994 -1995	ARC Small Grant "Thalamocortical relationships in the somatosensory system of mammals." PI: Leah Krubitzer, R VTHRC ARC 1261 94 B Small.
1994	University of Queensland Research Grant "The organization and connections of neocortex in mammals." PI: Leah Krubitzer, NSG-17 VTHRC-94.
1995	The Ciba Foundation Bursary Award Host for Zoltán Molnár. "Interaction between the developing thalamus and cerebral cortex: mechanisms involved in the specification of cortical areas."
1997 – 2000	NIH RO1. "The somatosensory cortex and thalamus." PI: Leah Krubitzer, 1 RO1 NS35103-01A1.
1997 – 2000	Whitehall Foundation "The role of the somatosensory system in intra- manual and bilateral coordination of the hands." PI: Leah Krubitzer M97-20.
1998 – 2001	McDonnell-Pew Cognitive Neuroscience Program "Higher order somatosensory processing networks: A combined fMRI study in monkeys and humans." PI: Leah Krubitzer.
2000 – 2004	NIH RO1 (NINDS) "The somatosensory cortex and thalamus." PI: Leah Krubitzer 1 RO1 NS35103-05A1.
2000 – 2004	NIH 1 R21 MH066756-01. "The role of the somatosensory cortex in affective social behavior." Co-PI.
2004 – 2008	McDonnell Foundation. "How does evolution build a complex brain?" PI: Leah Krubitzer.
2005 – 2010	R01 "The somatosensory cortex and thalamus." PI: Leah Krubitzer.
2008 – 2011	NSF Genetic and Epigenetic contributions to the cortical phenotype
2010 – 2012	R21 (NINDS) "Can cortical plasticity and adaptive behavior be amplified by an enhanced visual environment? PI: Leah Krubitzer
2010 – 2012	R21 "Effects of Early Experience on Somatosensory Systems in Voles. Co-PI Leah Krubitzer
2012 – 2014	R21 (NIBIB) "Development of a Microfluidic Thermal Regulator for Studies of Cortical Function
2010 – 2015	R01 (NINDS) "The somatosensory cortex and thalamus." PI: Leah Krubitzer
2013 – 2017	R01 (NEI) Can Cortical Plasticity be Directed and Amplified Following Early Loss of

Vision?

2014 – 2016 R03 (FIRCA) Effects of reversible deactivation of PPC in New World Cebus monkeys

Meetings and Conferences Organized

2001 Co-organizer for IIIrd Antonio Borsellino College on Neurophysics
"Evolution of Intelligent Behavior"
Trieste, Italy
April 23 - May 4

2004 Co-organizer for IIIrd Antonio Borsellino College on Neurophysics
"Sensory Coding - Spike Trains to Behavior"
Trieste, Italy
September 27, 2004 – October 8

2009 Co-Organizer. Summer Institute in Cognitive Neuroscience. Sage Institute
Santa Barbara, California
June 22 – July 3rd

2013 Co-Organizer. Summer Institute in Cognitive Neuroscience. Learning and Plasticity
Lake Tahoe, California
June 24 – 26

2014 Co-Organizer. Universitat Pompeu Fabra, Barcelona, Cognition, Brain and Technology.
Barcelona, Spain.

September 1 - 14

NIH Study Sections

Multimodal Integration Research Networks in Cognitive Neuroscience	June, 2002
IFCN-8	February, 2003 December, 2003
NIH, Human Brain Mapping	May, 2003 February, 2004 February, 2006
ZRG1-IFCN-E (01)	April, 2004
Director's Pioneer Award Special Study Section	2009
NIDA sponsored meeting: "Not Just a Matter of Gray and White: Exploring the Importance of Evolution, Genes and Experience on Brain Development" special council.	July, 2009
NIH; Mechanisms of Sensory, Perceptual and Cognitive Processes (SPC)	2013
ZRG1 F02B	June, 2014 October, 2014

NSF Research Panels

2013 Organization Program in Neural Systems
Panel 2: Neuro EvoDevo

Editorial Board

Evolution of Nervous Systems, Volumes 1-4, (2003-2006)
Elsevier Science, publisher

International Review in Neurobiology
Elsevier Science, publisher

Journal of Comparative Neurology

Visual Neuroscience

Anatomical Record

Brain, Behavior and Evolution

Editor

The Evolution of Nervous systems in mammals, Volume IV (2006)
Elsevier Science, publisher

Section Editor: The Cognitive Neurosciences. Learning and Plasticity (2015)

Journal Referee 1990 - present

American Journal of Primatology
Anatomical Records
Brain, Behavior and Evolution
Brain Research
Cerebral Cortex
Development
European Journal of Neuroscience
Experimental Brain Research
Evolution
Frontiers in Neuroanatomy
Frontiers in Neuroscience
Human Brain Mapping

Journal of Comparative Neurology
Journal of Neurophysiology
Journal of Neuroscience
Journal of Visual Neuroscience
Nature Neuroscience
Nature
Neuroimage
Neuron
Neuroscience
PNAS
PLoS
Science
Somatosensory and Motor Research

Invited Conferences and Symposia

1994	Rapporteur for Dahlem Workshop on Flexibility and Constraint in Behavioral Systems. Berlin, Germany.
1994	Symposium on "Cortical Field Development and Evolution. European Winter Conference on Brain Research. La Playne, France.
1994	Symposium on Somesthesis and the Neurobiology of the Somatosensory Cortex. Stockholm, Sweden.
1994	The Ciba Foundation Symposium on "The Development of the Cerebral Cortex". London, England.
1995	Symposium on the Formation of Cortical Maps. Held in Honor of Hendrik Van der Loos. Amsterdam, Netherlands.
1996	American Association of Anatomists, Herrick Award Lecture, Washington, D. C., USA.
1996	McDonnell, Summer Institute in Cognitive Neuroscience, Dartmouth College and School of Medicine. Hanover, NH, USA.
1996	Society for Neuroscience Special Interest Social: The Future of Research on the Somatosensory System. Washington D.C., USA.
1997	Polish Society for Neuroscience meeting, special lecture, Cortical Plasticity in Mammals. Lodz, Poland.
1997	Human Frontier Science Program Workshop, Evolutionary Perspectives on the Brain and Mind, Strasbourg, France.
1998	The Fifth International Congress of Neuroethology. Early brain damage and cortical reorganization: Implications for theories of brain evolution. La Jolla, CA, USA.
1999	Harvard Medical School, Program in Neuroscience. Student-run Spring Symposium on Evolutionary Neurobiology. Boston, MA, USA.
1999	Novartis Foundation Symposium, Evolutionary Developmental Biology of the Cerebral Cortex. London, England.

2000 Third Berlin Workshop on Cortical Plasticity, Mechanisms of Reorganization. Berlin, Germany.

2000 Cajal Club mini symposium on Evolution of the Neocortex. San Diego, CA, USA.

2000 NIMH, Opportunities in Cognitive Neuroscience Workshop: The use of multiple techniques to examine the somatosensory system in human and non-human primates. Bethesda, MD, USA.

2000 The Jackson Laboratory Symposium, University of California, Davis. Davis, CA, USA.

2001 Summer Institute in Cognitive Neuroscience. Dartmouth, NH, USA.

2001 Cold Spring Harbor, Banbury Center, Cortical Maps. Laurel Hollow, NY, USA.

2001 MGH - Winter Conference on Brain Research Symposium on Cortical Map Plasticity. Boston, MA, USA.

2001 Jean Piaget Society Meeting. Berkeley, CA, USA.

2001 Symposium on the Evolution of the Brain. Kyoto, Japan.

2002 Fourth Workshop on cortical plasticity: Multimodal plasticity in cerebral cortex in the developmentally blind. Schwetzingen, Germany.

2002 Attention and Performance. Erice, Italy.

2003 23rd European Winter Conference on Brain Research. France

2003 International Brain Research Organization. Prague, Czech Republic.

2003 Keynote Speaker at the Annual Retreat of the Center for the Neural Basis of Cognition. Carnegie Mellon and University of Pittsburgh Neuroscience graduate group. Pittsburgh, PA, USA.

2003 Keynote speaker, Annual Retreat of Neuroscience graduate group. Tulane University, New Orleans, LA, USA.

2004 The McDonnell Foundation Conference. Palisades, New York, USA.

2004 Novartis Foundation Symposium 270: Percept, Decision, Action: Bridging the Gaps. Trieste, Italy.

2005 Darwin Day Keynote Speaker, Sacramento, CA, USA.

2005 American Association for the Advancement of Science. Symposium on Comparative Perspectives on Brain and Behavior. Washington D.C., USA.

2005 Experimental Biology Conference. San Diego, CA, USA.

2005 Summer Institute in Cognitive Neuroscience, Evolutionary plasticity in the mammalian neocortex. Dartmouth University, Hanover CT, USA.

2005 OSA meeting symposium: Evolution of the visual system, Tucson, AZ, USA.

2005 Plenary Lecture. European Brain and Behavior Society. Dublin, Ireland.

2005 National Academy of Sciences, 17th Annual Frontiers of Science Symposium. Design Principles in the Visual System, Chair. Irvine, CA, USA.

2006 ICAM: Grand Challenges in Neuroscience. Santa Fe, NM, USA.

2007 EEEC. Paris, France.

2006 ICAM: Annual conference, Grand Challenges in Neuroscience. Santa Fe, NM, USA.

2007 Keynote Speaker, Human Brain Mapping. Chicago, IL, USA.

2007 Project for Explaining the Origin of Humans (POH) Symposium. La Jolla, CA, USA.

2007 Society for Neuroscience, Special Lecture. San Diego, CA, USA.

2007 EEEC, Paris, France

2007 Consciousness and the Brain in Context Workshop, UC Berkeley. Berkeley, CA, USA.

2008 International Neuropsychological Symposium, Evolution of the Human Brain and Human Cognition. Tenerife, Spain.

2008 Museum of Natural History, First Fridays lecture series. Los Angeles, CA, USA.

2010 Plenary Lecture. University of Washington. Roger Brown Loucks Lectureship. Seattle, WA, USA.

2010 Woods Hole. Neural systems and behavior course lecture. Woods Hole, MA, USA.

2010 Barcelona, Cognition, Brain and Technology. Barcelona, Spain.

2010 Vision Down Under, University of Queensland. Brisbane, Australia.

2010 Karger Symposium. San Diego, CA, USA.

2011 Center for Mind and Brain, UC Davis. Davis, CA, USA.

2011 University of Oregon, Special Lecture, Graduate Student Retreat. Eugene, OR, USA.

2011 The Allen Institute, Open Questions in Neuroscience. Seattle, WA, USA.

2012 National Academy of Sciences Sackler Symposium: In Light of Evolution. Irvine, CA USA.

2012 University of Texas, Center for Brain Health Symposium: Reprogramming the Brain to Health. Dallas, TX, USA

2012 New York Academy of Sciences: Play, Attention, and Learning. New York, NY, USA.

2012 McDonnell Summer Institute. Santa Barbara, CA, USA.

2013 Keynote Speaker, Annual Baycrest Rotman Research Institute Neuroscience Conference. Toronto, Canada.

2013 Keynote Speaker, Annual Neuroscience Graduate Student Symposium. Lisbon, Portugal

2013 Summer Institute in Cognitive Neuroscience, Lake Tahoe, CA, USA.

2013 Universitat Pompeu Fabra, Barcelona, Cognition, Brain and Technology. Barcelona, Spain.

2014 Universitat Pompeu Fabra, Barcelona, Cognition, Brain and Technology. Barcelona, Spain.

2014 Harley Hotchkiss Memorial Lecture, University of Lethbridge, Alberta, Canada

2014 Harley Hotchkiss Memorial Lecture, University of Calgary, Alberta Canada

2014 Summit on Human Evolution, Allen Institute, Seattle, Washington USA

Seminars and Colloquia

1984 Society for Neuroscience (Middle Tennessee Chapter).

1985 J.B. Johnston Club. Dallas, TX, USA.

1985 Vanderbilt Visionaries. Nashville, TN, USA.

1987 Vanderbilt Visionaries. Nashville, TN, USA.

1990 University of Queensland. Brisbane, Australia.

1991 J. B. Johnston Club. New Orleans, LA, USA.

1991 Department of Psychology, Vanderbilt University. Nashville, TN, USA.

1992 University of California. Irvine, CA, USA.

1993 University of Sydney. Sydney, Australia.

1993 INSERM. Lyon, France.

1994 European Winter Brain Conference. La Playne, France.

1995 Max Planck. Frankfurt, Germany.

1996 Cornell University, Department of Neurobiology. Ithaca, NY, USA.

1996 Department of Optometry, UC Berkeley. Berkeley, CA, USA.

1997 Department of Psychology, UC Berkeley. Berkeley, CA, USA.

1997 MIT. Boston, MA, USA.

1997 Nencki Institute. Warsaw, Poland.

1998 Center for Visual Science, University of Rochester. Rochester, NY, USA.

1998 Department of Neurobiology, School of Medicine, Harvard University. Boston, MA, USA.

1998 Department of Molecular and Cellular Biology, UC Berkeley. Berkeley, CA, USA.

1998 UC San Francisco. San Francisco, CA, USA.

1999 Hebb Club, Berkeley, CA, USA.

2000 Helmholtz Club, UC Berkeley, Berkeley, CA, USA

2000 Department of Psychology, UC Berkeley. Berkeley, CA, USA.

2000 University of New York. Stony Brook, NY, USA.

2001 Princeton University. Princeton, NJ, USA.

2001 Bell Laboratories. Murray Hill, NJ, USA.

2001 Department of Psychology, UC Berkeley. Berkeley, CA, USA.

2001 University of Chicago. Chicago, IL, USA.

2001 University of Illinois. Chicago, IL, USA.

2002 California Institute of Technology. Pasadena, CA, USA.

2002 MIT. Boston, MA, USA.

2002 Brandeis University, Boston, MA, USA.

2002 University of California, San Diego/The Salk Institute. San Diego, CA, USA.

2002 University of Washington. Seattle, WA, USA.

2003 The Keck Center, UC San Francisco. San Francisco, CA, USA.

2003 The Ernest Gallo Clinic and Research Center, UC San Francisco. San Francisco, CA, USA.

2003 Krieger Mind/Brain Institute, Johns Hopkins University. Baltimore, MD, USA.

2003 Department of Anthropology, UC San Diego. San Diego, CA, USA.

2003 Department of Cell Biology and Neuroscience, Montana State University. Bozeman, MT, USA.

2003 Department of Psychology, Stanford University. Palo Alto, CA, USA.

2004 Smith-Kettlewell Eye Research Institute. San Francisco, CA, USA.

2005 Oxiopia seminar series, Department of Optometry, UC Berkeley. Berkeley, CA, USA.

2006 University of Illinois. Champagne-Urbana, IL, USA.

2006 Mt. Sinai Medical School. New York, NY, USA.

2007 Department of Neurobiology, School of Medicine, Harvard University. Boston, MA, USA.

2007 The Allen Institute for Brain Science. Seattle, WA, USA.

2007 Department of Human Development and Department of Cognitive Neuroscience, UC San Diego. San Diego, CA, USA.

2007 Department of Psychology, Weber State University. Ogden, UT, USA.

2008 Department of Neuroscience, Virginia Commonwealth University. Richmond, VA, USA.

2008 Department of Psychology, Johns Hopkins University. Baltimore, MD, USA.

2008 Department of Philosophy, University of California, Berkeley. Berkeley, CA, USA.

2008 Department of Psychology, University of Iowa. Iowa City, IA, USA.

2008 Department of Anatomy and Cell Biology, University of Melbourne. Melbourne, Australia.

2008 Queensland Brain Institute, University of Queensland. Brisbane, Australia.

2009 Columbia University. New York, NY, USA.

2009 University of California, Irvine. Irvine, CA, USA.

2010 Vanderbilt University – graduate seminar course invited lecture. Nashville, TN, USA.

2011 Department of Psychology, UC Berkeley. Berkeley, CA, USA.

2011 Department of Psychology, Vanderbilt University, Nashville, TN, USA.

2011 Department of Neurobiology, Physiology, and Behavior, UC Davis. Davis, CA, USA.

2012 Center for Complex Systems, University of Michigan. Ann Arbor, MI, USA.

2013 Department of Neurobiology, University of Chicago. Chicago, IL, USA.

2013 Yale University, Department of Neurobiolgy, New Haven CT, USA

2014 Maximillian Ludwig University, Munich Germany

PUBLICATIONS

Book Chapters

1. Kaas, J.H. and L.A. Krubitzer (1991) The organization of extrastriate visual cortex. (B. Dreher and S.R. Robinson, eds.), In: Vision and Visual Dysfunction, Volume 3, Neuroanatomy of the Visual Pathways and Their Development. Macmillan Press, London, pp 302-323.

2. Krubitzer, L., R. Belew, C. Boake, E. Boncinelli, E. Brenowitz, S. de Belle, J. Edwards, W.P.M. Geraerts. B. Kyriacou, G. Miklos, F. von Schilcher (1994) How Do Evolution and Behavior Interact? In: Dahlem Workshop on Flexibility and Constraint in Behavioral Systems. John Wiley and Sons, Chichester, pp. 295-305.

3. Krubitzer, L.A. (1996) The Organization of Lateral Somatosensory Areas In Primates and Other Mammals. In: Somesthesis and the Neurobiology of the Somatosensory Cortex, International Symposium Series, (O. Franzen, R. Johanson, and L. Terenius, eds.) Boston, Birkhaeuser. pp.173-185.

4. Krubitzer, L.A. (1998) Constructing the neocortex: Influences on the pattern of organization in mammals. In: Brain and Mind: Evolutionary Perspectives. (M. S. Gazzaniga and J. Altman, eds.) Human Frontier Science Program. Strasbourg, pp. 19-34.

5. Krubitzer, L.A. (2000) How does evolution build a complex brain? In: Evolutionary Developmental Biology of the Cerebral Cortex (G.R. Bock, G. Cardew, ed.) John Wiley and Sons, LTD. Chichester, pp. 206-220.

6. Krubitzer, L.A. (2002) Evolutionary Perspectives in: Cognitive Neuroscience (M. Gazzaniga, R. Ivry, and R. Mangun eds.) W. W. Norton and Company, pp. 577-596.

7. Krubitzer, L. and Kahn, D (2004) The evolution of human neocortex: Is the human brain fundamentally different than that of other mammals? In: Functional Neuroimaging of Visual Cognition (Attention and Performance Series 20). (N. Kanwisher, J. Duncan, C. eds.) Oxford University Press, Oxford, pp. 57-82.

8. Karlen, S. J. and Krubitzer, L. (2006) The evolution of the neocortex in mammals: intrinsic and extrinsic contributions to the cortical phenotype. In: Percept, Decision, Action: Bridging the Gaps (D. J. Chadwick, M. diamond and J. Goode eds). Novartis Foundation Symposium. John Wiley and Sons Ltd, Chichester, UK, pp 146-163.

9. Krubitzer, L. and Hunt, D. (2006). Captured in the net of space and time: Understanding cortical field evolution. In: The Evolution of Nervous Systems in Mammals, Volume IV (Kaas, J.H. and Krubitzer L., eds). Academic Press, Oxford, pp. 49-72.

10. Disbrow, E., Hinkley, L., Padberg, J., and Krubitzer, L. (2006). Hand use and the evolution of posterior parietal cortex in primates. In: The Evolution of Nervous systems in Primates, Volume IV (Kaas, J.H. and Preuss, T. eds.). Academic Press, Oxford, pp. 407-416.

11. Krubitzer, L., and Disbrow, E. (2008) The evolution of parietal areas involved in hand use in primates. In: The Senses: A Comprehensive Reference. Volume 6, Somatosensation (Jon Kaas and Ester Gardner eds.) Elsevier, London, pp. 183-214.

12. Karlen, S. J. and Krubitzer, L. (2009) The organization of neocortex in marsupials In: Encyclopedia of Neuroscience. In Squire LR (ed) Encyclopedia of Neuroscience. Oxford: Adademic Press. Volume 5, pp. 671-679.

13. Krubitzer, L., and Campi, K (2009). The organization of neocortex in monotremes. In: Encyclopedia of Neuroscience. In Squire LR (ed) Encyclopedia of Neuroscience. Oxford: Adademic Press. Volume 6, pp. 51-59.

14. Krubitzer, L. Padberg, J. (2009) Evolution of parietal association areas of the neocortex in mammals. In: Encyclopedic Reference of Neuroscience (Ann Butler, ed.) Springer, Volume 5. Pp 1225-1231.

15. Krubitzer, L. and Hunt, D. (2009). Captured in the net of space and time: Understanding cortical field evolution. In: Evolutionary Neuroscience (Kaas, J.H. ed). Chapter 23 Academic Press, Oxford, pp. 545-568.

16. Karlen, S.J., Hunt, D., and Krubitzer (2010). Cross-modal plasticity in mammalian neocortex. Chapter 18 In: Oxford Handbook of Developmental and Behavioral Neuroscience. (Eds. Mark S. Blumberg, John H. Freeman, and Scott R. Robinson). Oxford University Press. Pp 357-374.

17. Krubitzer, L and Disbrow E (2010) The evolution of parietal areas involved in hand use in primates. In: Spatial Cognition, Spatial Perception. (Dolins, EL and Mitchell, RW eds). Cambridge University Press. Chapter 16. pp. 365-421.

18. Krubitzer LA and Seelke AMH (2013) Cortical evolution in mammals: The bane and beauty of phenotypic variability. In: In the Light of Evolution. (Striedter, GF, Avise JC, and Ayala FJ eds.) National Academies Press. Chapter 6, pp. 91 – 111

19. Cooke DF, Goldring A, Recanzone GH, Krubitzer L (2014) The evolution of parietal areas associated with visuomanual behavior: From grasping to tool use. In The Visual Neurosciences (Chalupa, L and Werner J eds). MIT Press, Cambridge pp. 1049-1063.

20. Krubitzer L (2015) Lessons from Evolution. In: The Future of the Brain; Essays by the World's Leading Neuroscientists. (Marcus, G and Freeman, J eds). Princeton University Press pp 186 – 193.

Journal Reviews

1. Krubitzer, L (1995) The organization of neocortex in mammals: Are species differences really so different? Trends Neurosci. 18:408-417. PMID: 7482807

2. Krubitzer, L (1998) What can monotremes tell us about brain evolution? Philos Trans R Soc Lond B Biol Sci. 353:1127-1146. PMCID: PMC1692304

3. Rosa, MG and Krubitzer, LA (1999) The evolution of visual cortex: Where is V2? Trends Neurosci. 22: 242-247. PMID: 10354599

4. Krubitzer, L and Huffman KJ. (2000) Arealization in the neocortex of mammals: Genetic and epigenetic contributions to the phenotype. Brain Behav Evol. 55:322-335. PMID: 10971017

5. Krubitzer, L and Kahn, D (2003) Nature versus nurture revisited: An old idea with a new twist. Prog in Neurobiol. 70:33-52. PMID: 12927333

6. Krubitzer, L and Kaas, JH (2005) The evolution of the neocortex in mammals: How is phenotypic diversity generated? Curr Opin Neurobiol. 15:444-453. PMID: 16026978

7. Karlen, SJ and Krubitzer, L (2007) The functional and anatomical organization of marsupial neocortex; evidence for parallel evolution in mammals. Prog Neurobiol. 82:122-141. PMCID: PMC1978492

8. Krubitzer L (2007) The magnificent compromise: Cortical field evolution in mammals. Neuron. 56:201-208. PMID: 17964240

9. Larsen DD and Krubitzer L (2008) Genetic and epigenetic contributions to the cortical phenotype in mammals. Brain Res Bull. 75:391-397. PMCID: PMC2607039

10. Krubitzer L (2009) In search of a unifying theory of complex brain evolution. The Year In Cognitive Neuroscience. Ann N Y Acad Sci. 1156: 44-67. PMCID: PMC2666944

11. Krubitzer L, Campi KL, Cooke DF (2011) All rodents are not the same: A modern synthesis of cortical organization. Brain Behav and Evol. 78:51-93. PMCID: PMC3182045

12. Krubitzer LA, and Seelke AMH (2012) Cortical evolution in mammals: The bane and beauty of phenotypic variability. Proc Natl Acad Sci U S A. 109:10647-10654. PMCID: PMC3386882

13. Hedges JH, Adolph KE, Bavelier D, Fiez JA, Krubitzer L, McAuley JD, Newcombe NS, Fitzpatrick SM, Ghajar J (2013) Play, attention and learning: How do play and timing shape the development of attention and influence classroom learning? Ann NY Acad Sci. 1292:1-20. PMCID: PMC3842829

14. Krubitzer L and Dooley JC (2013) Cortical plasticity within and across lifetimes: How can development inform us about phenotypic transformation? Front Hum Neurosci. 7:620. PMCID: PMC3793242

15. Krubitzer L and Stolzenberg DS (2014) The evolutionary masquerade: Genetic and epigenetic contributions to the neocortex. Curr Opin Neurobiol. 24C:157-165 PMID: 24492091

Research Papers

1. Krubitzer LA, Sesma MA, and Kaas JH (1986) Microelectrode maps, myeloarchitecture, and cortical connections of three somatotopically organized representations of the body surface in the parietal cortex of squirrels. J Comp Neurol. 250:403-430. PMID: 3760247

2. Huerta MF, Krubitzer LA, and Kaas JH (1986) Frontal eye field as defined by intracortical microstimulation in squirrel monkeys, owl monkeys, and macaque monkeys: I. subcortical connections. J Comp Neurol. 253:415-439. PMID: 3793998

3. Huerta MF, Krubitzer LA, and Kaas JH (1987) Frontal eye fields as defined by intracortical microstimulation in squirrel monkeys, owl monkeys, and macaque monkeys II: Cortical connections. J Comp Neurol. 265:332-361. PMID: 2447132

4. Krubitzer LA and Kaas JH (1987) Thalamic connections of three representations of the body surface in somatosensory cortex of grey squirrels. J Comp Neurol. 265:549-580. PMID: 2448348

5. Luethke LE, Krubitzer LA, and Kaas JH (1988) Cortical connections of electrophysiologically and architectonically defined subdivisions of auditory cortex in squirrels. J Comp Neurol. 268:181-203. PMID: 3360984

6. Krubitzer LA and Kaas JH (1988) Responsiveness and somatotopic organization of anterior parietal field 3b and adjacent cortex in newborn and infant monkeys. Somatosens Mot Res. 6:179-205. PMID: 3242345

7. Krubitzer LA and Kaas JH (1989) Cortical integration of parallel pathways in the visual system of primates. Brain Res. 478:161-165. PMID: 2466529

8. Kaas JH, Krubitzer LA, and Johanson KL (1989) Cortical connections of areas 17 (V-I) and 18 (V-II) of squirrels. J Comp Neurol. 281:426-446. PMID: 2703555

9. Luethke LE, Krubitzer LA, and Kaas JH (1989) Connections of primary auditory cortex in the New World monkey, *Saguinus*. J Comp Neurol. 285:487-513. PMID: 2474584

10. Kaas JH, Krubitzer LA, Chino YM, Langston AL, Polley EH, and Blair N (1990) Reorganization of retinotopic cortical maps in adult mammals after lesions of the retina. Science. 248:229-231. PMID: 2326637

11. Krubitzer LA and Kaas JH (1990) The organization and connections of somatosensory cortex in marmosets. J Neurosci. 10:952-974. PMID: 2108231

12. Krubitzer LA and Kaas JH (1990) Cortical connections of MT in four species of primates: areal, modular, and retinotopic patterns. Vis Neurosci. 5:165-204. PMID: 2278944

13. Krubitzer L and Kaas J (1990) Convergence of processing channels in the extrastriate cortex of monkeys. Vis Neurosci. 5:609-613. PMID: 1707652

14. Krubitzer LA and Calford MB (1992) Five topographically organized fields in the somatosensory cortex of the flying fox: microelectrode maps, myeloarchitecture, and cortical modules. J Comp Neurol. 317:1-30. PMID: 1573055

15. Krubitzer LA and Kaas JH (1992) The somatosensory thalamus of monkeys: Cortical connections and a redefinition of nuclei in marmosets. J Comp Neurol. 319:123-140. PMID: 1375605

16. Kaas JH and Krubitzer LA (1992) Area 17 lesions deactivate area MT in owl monkeys. Vis Neurosci. 9:399-407. PMID: 1390397

17. Krubitzer LA, Calford MB, and Schmid LM (1993) Connections of somatosensory cortex in megachiropteran bats: The evolution of cortical fields in mammals. J Comp Neurol. 327:473-506. PMID: 8440777

18. Krubitzer LA and Kaas JH (1993) The dorsomedial visual area (DM) of owl monkeys: Connections, myeloarchitecture, and homologies with other primates. J Comp Neurol. 334:497-528. PMID: 8408763

19. Rosa MGP, Schmid LM, Krubitzer LA, and Pettigrew JD (1993) Retinotopic organization of the primary visual cortex of flying foxes (*Pteropus poliocephalus* and *Pteropus scapulatus*). J Comp Neurol. 335:55-72. PMID: 8408773

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