

RICHARD CHARLES KRUEGER, JR., MD, PH.D

CURRICULUM VITAE (last updated on 1/8/17)

PERSONAL HISTORY:

Richard Charles Krueger, Jr., MD, Ph.D
Neonatologist
Neuroscientist
Clinical Associate in Pediatrics, The University of Chicago
Attending, Pediatrics and Neonatology
5841 South Maryland Ave MC6060, Chicago, IL 60637
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Personal Information:

Born Brooklyn, NY, USA on January 27, 1960
Married, 2 children

EDUCATION:

1975-1978	Cheltenham High School, Graduated with General Honors
1978-1982	University of Chicago, B A. 6/12/82
1982-1983	Laboratory Technician, University of Chicago (Dr. Nancy Schwartz)
1983-1985;	University of Chicago, M.D. with Honors, 6/8/90
1989-1990	Pritzker School of Medicine
1983-1988	University of Chicago, Ph.D. 12/9/88 in Biochemistry, Department of Biochemistry and Molecular Biology
1990-1991	Pediatric Internship, 7/1/90 to 6/30/91, Children's Memorial Hospital, Northwestern University
1991-1993	Pediatric Residency, 7/1/91 to 6/30/93, Children's Memorial Hospital, Northwestern University
1993-1996	Neonatology Fellowship, 7/1/93 to 6/30/96, Wyler Children's Hospital, University of Chicago
1996-1998	Post Doc in Neuroscience under Dr. Nancy Schwartz 7/1/96 to 6/30/98, University of Chicago

Medical Licensure

Active: Illinois Indiana, California, Mississippi, Oklahoma
Inactive: Missouri, Washington, New Mexico.

Board Certifications: NBME/USMLE, Pediatrics, Neonatal-Perinatal Medicine

Other Certifications: BLS for healthcare providers, NRP Training

Current Affiliations (abbreviated)

6/18/12 - present	University of Chicago Comer Children's Hospital
6/18/12 - present	Community Hospital of Munster
3/5/13 - present	Little Company of Mary Hospital Medical Staff

ACADEMIC APPOINTMENTS

9/18/98 - 12/31/99 Instructor of Pediatrics, University of Chicago
 1/1/99 - 6/30/05 Assistant Professor of Pediatrics, David Geffen School of Medicine at UCLA
 7/1/05 - 7/31/06 Associate Professor of Pediatrics, David Geffen School of Medicine at UCLA
 8/1/06 - 9/30/06 Visiting Scientist, Cedars-Sinai Research Institute, Cedars-Sinai Medical Center
 10/13/06-6/30/08 Associate Professor of Pediatrics, The University of New Mexico
 7/31/06-12/31/08 Associate Research Professor of Pediatrics, The University of New Mexico
 1/1/09 - 4/30/09 Visiting Associate Professor, The University of New Mexico
 7/1/12 - present Clinical Associate in Pediatrics, University of Chicago

PROFESSIONAL ACTIVITIES:Committee Service

1999-2000 Fetal-Infant Mortality Review Project Community Advisory Group, County of Los Angeles - Department of Health Services
 1999 to 2003 Pediatric Residency Review Committee, Department of Pediatrics
 2000 to 2003 Pediatric Grand Rounds Committee, Cedars-Sinai Medical Center
 2000 to 2002 Norwood Procedure Outcome Quality Action Team
 2002 to 2005 Neonatology Education Committee
 2002 to 2006 Chair, Neonatology Fellowship Committee

Professional Associations and Scholarly Societies

1999 California Association of Neonatologists
 1999 Fellow, American Academy of Pediatrics (Members of the sections on Perinatal Medicine and Neurology)
 1999 Member, Society of Neuroscience
 2000 Member, Western Society for Pediatrics Research
 2000 Member, Society for Pediatrics Research
 2000 Associate Member, American Association Neurological Surgeons

Invited Reviewer for Peer-Review Journals/Granting Organizations

2001 Ad hoc for Pediatric Research
 2004 Ad hoc for Journal of Neuroscience Research
 2004 Ad hoc for Medical Research Council (MRC), London (Grant Proposal Peer Review)
 2001 Ad hoc for Pediatrics

HONORS AND SPECIAL AWARDS:

1978 Graduate High School with Honors
 1982 Graduate College with Honors in the Biological Sciences
 1985-1990 Awarded Pediatrics Training Grant [PHS Fellowship 5 T32 HD07009-15]
 1990 Awarded Dr. Harold Lampert Research Award for the Best Thesis in Biomedical Research
 1990 Graduated Medical School with Honors
 1994 First Prize in Basic Science in the Fifth Annual University of Chicago Postgraduate Research Symposium
 2003 Awarded NIH Pediatric Research Loan Repayment, renewed in 2005 and 2006
 2004 Awarded WSPR Travel award for abstract "Effects of transforming growth factor- β 2 (TGF- β 2) on neural precursor fate"

RESEARCH GRANTS AND FELLOWSHIPS RECEIVED:

1985-1990 Pediatrics Training Grant [PHS Fellowship 5 T32 HD07009-15]
 1993 Children's Research Foundation grant (3,000)
 1994 Wyeth's Pediatrics Research grant (3,000)
 1994 A second Children's Research Foundation grant (3,000)
 1995 A second Wyeth's Pediatrics Research grant (3,000)
 1995 A third Children's Research Foundation grant (3,000)
 1996 A fourth Children's Research Foundation grant (3,000)
 1997 A fifth Children's Research Foundation grant (3,000)
 1998 Brain Research Foundation grant (15,000)
 Principal Investigator - David Frim; Co-PI Richard Krueger
 1998 A sixth Children's Research Foundation grant (3,000)
 2000 Ahmanson Pediatric Endowment Grant (4/1/00 to 11/30/00)
 A yeast two-hybrid approach to cloning glycosyltransferases \$8,000DC

2002	UCLA Child Health Research Career Development Award (2/15/012 to 11/30/02) Hydrocephalus Alters CNS Development Via Proteoglycan Expression \$100,000DC [Subcontract of 5K12HD034610-06]
2002	Howard Hughes Supplemental Award (12/1/012 to 11/30/02) Hydrocephalus Alters CNS Development Via Proteoglycan Expression \$25,000DC
1999 to 2004 3/05-2/06	Research supported by Harry & Ruth Roman Chair in Neonatology and Fashion Industry Guild >\$650,000 CLINICAL RESEARCH FEASIBILITY FUNDS (CRFF) PROGRAM (Harbor UCLA – Cedars GCRC [NIH M01-RR00425] Gail Anderson PI @Harbor-UCLA / Schlomo Melmed PI @CSMC) - CSF and CSF Cell Repository: Hydrocephalus alters neural progenitor fate through TGF- 2: implications for white matter injury \$20,000 TDC
7/05-7/06	CSRI Seed Grant for Stem Cell Research - Cultivating neural stem cells from the cerebrospinal fluid: Implications for healing neonatal white matter injury \$30,000 TDC
6/2004-11/08	March of Dimes -6-FY2004-1006 “Hydrocephalus Alters Neural Precursor Fate by Modulating the Extracellular Matrix: Implications for Preventing and Treating White Matter Injury” \$224,400 TC (<i>current dates include an approved no cost extension</i>)
12/2006 - 11/08	NIH Pediatric Research Loan Repayment Program Renewal Application
12/07-11/08	University of New Mexico Department of Pediatric Research Grant “Aggrecan: a newly recognized player in neural progenitor developmental biology” \$15,000 DC

Previous Research Collaborators

James Sutcliffe, Vanderbilt University
 Yi Sun, UCLA
 Rick Matthews, SUNY Syracuse, NY
 Bennett Leventhal, New York University, NYC, NY
 Edward Cook, University of Illinois, Chicago, IL

Research Interests

Developmental Biology of the Extracellular Matrix in the Brain
 Biochemistry and Molecular Biology of Chondroitin Sulfate
 Proteoglycans
 Neurodevelopment and Neonatal Brain Injury
 Neonatal Hydrocephalus
 Neural Progenitor Biology
 Interactions between aggrecan and NOTCH signaling
 Autism

LECTURES AND PRESENTATIONS:

Teaching Assistant, Calculus (College Students), Department of Mathematics
 University of Chicago, 1979 - 1982
 Teaching Assistant, Core Biochemistry Class (College Students), Department of Biological Sciences
 University of Chicago, 1983
 Topics in Neonatology (Medical students, Pediatric and Family Practice Residents, Neonatology
 Fellows), Department of Pediatrics, University of Chicago, 1993 to 1998
 Invited Speaker: International Workshop on Tocolytic Magnesium: Biologic Plausibility for
 Fetotoxicity, University of Chicago, 1998
 Invited Speaker: Cranio-Facial Clinic Lecture, Cedars-Sinai Medical Center, 1999
 Invited Speaker: Neonatology Research Seminar Series, Cedars-Sinai Medical Center, 1999-2004
 Invited Speaker: Neonatology Research Seminar Series, Harbor-UCLA Medical Center, 2000
 Invited Speaker: Pediatrics Grand Rounds, Cedars-Sinai Medical Center, 1999-2004
 Invited Speaker: Pediatrics Case Conference, Cedars-Sinai Medical Center, 1999-2004
 Invited Speaker: OB/Gyn Grand Rounds, Cedars-Sinai Medical Center, 2003
 Chair, Neuroscience Session, Western Society of Pediatric Research Meeting, Carmel, CA, 2/2000
 Invited Speaker: Research Seminar (Dr. Susan Hockfield's Lab Group), Yale University 11/01
 Invited Speaker: 2002 Gordon conference “Magnesium in Biochemical Processes and Medicine”.
 Talk entitled “Proliferation and Apoptosis of Cultured Neuronal cells
 Exposed to Increased Extracellular Magnesium: Possible Mechanism of
 Action” Ventura, California 2/2002
 Invited Singer/Performer: Performed “The Ballad of Mary O’Connor” Brave New World:
 American Theater's Response to 9/11, Town Hall, New York City 9/10/02
 Co-Chair, Late Breaker Session, Society of Pediatric Research Meeting, Seattle, WA, 5/2003
 Invited Speaker: Research Seminar Kennedy Center University of Chicago 5/19/03
 Invited Speaker: Neonatology/Perinatal Research Group Northwestern University (Evanston
 Hospital) Invited by Sid Tan 5/21/03
 Invited Speaker: UCLA Neural Repair Seminar invited by Dr. S. Thomas Charnichiel 10/3/03
 Invited Speaker: CHLA Neonatal Research Seminar invited by Dr. Istvan Seri 10/14/03
 Invited Speaker: Academic Day for Neonatologists of Southern California (ANOSC meeting)
 (CHOC) 10/30/03
 Invited Speaker: UCLA Stem Cell Seminar organized by Dr. Harley Kornblum 1/3/04
 Invited Speaker: CSMC Research Grand Rounds 3/19/04

Invited Speaker: UCLA Stem Cell Seminar organized by Dr. Harley Kornblum 1/14/05

Invited Speaker: Conference for Neonatologists and Fellows at UCSD invited by Neil Finer 7/27/05

Invited Speaker: CSMC Pediatrics Grand Rounds 8/25/05

Invited Speaker: Jean De Vellis Lab Group at UCLA 10/4/05

Invited Speaker: Yi Sun Lab Group at UCLA 10/20/05

Session Moderator: Academic Day for Neonatologists of Southern California (ANOSC meeting)
(CHOC) 11/2/05

Invited Speaker: UCLA Stem Cell Seminar organized by Dr. Harley Kornblum 2/10/06

Invited Speaker: Basic Neuroscience Research Seminar Department of Pediatrics at UCSF
Invited by Dr. Donna Ferriero 2/14/06

Invited Speaker: Yi Sun Lab Group at UCLA 2/21/06

Invited Speaker: CSMC Research Grand Rounds 3/17/06

Invited lectures since coming to UNM

Invited Speaker: Neuroscience Seminar Series, 5/06 Invited by Dan Savage and Kristi Watterberg

Invited Speaker: Neuroscience Journal Club at UNM 6/15/07

Invited Speaker: Neuroscience Seminar Series, "Extracellular matrix regulation of self-renewal and differentiation of neural progenitors: Implications for novel diagnostic and therapeutic interventions of human disease" 2/21/08 Invited by Donald Partridge

Invited Speaker: Signature Program for Child Health Research 3x5x5 Event "Aggrecan Down-regulates NOTCH Signaling in the Brain: Implications for Human Disease".
2/21/08 Invited by Sally Davis

Invited Speaker: Pediatric Research Week 2008 "Loss of Brain Aggrecan Leads to Increased Notch Signaling in Neural Progenitors: Consequences to Brain Development and Human Disease". 4/16/08 Invited by Sally Davis

Invited Speaker: University of Connecticut Children's Hospital "The developing brain is a moving target: the cross talk among brain proteoglycans and neural progenitors, and its consequences to human disease." 7/18/08 Invited by Paul Dworkin

Invited Speaker: Stonybrook University "The developing brain is a moving target: brain aggrecan, notch, the germinal matrix, and human disease."
10/20/08 Invited by Margaret McGovern

Invited Speaker: University of Illinois/Carles Clinic "The developing brain is a moving target: cross talk among progenitors via aggrecan and notch and implications for human disease." Research Seminar 1/22/09 Invited by Stephanie Beever

Invited Speaker: Neonatology Associates, Ltd. Phoenix AZ "The Developing Brain is a Moving Target: The Cross Talk between Old and New Ideas Regarding Neonatal Hydrocephalus."
Research Seminar 6/29/09 Invited by Debra Tom

Invited Speaker: University of Illinois/Chicago Circle Campus "The Developing Brain is a Moving Target: The Cross Talk between Old and New Ideas Regarding Neonatal Hydrocephalus."
Research Seminar 1/14/09 Invited by Usha Raj

Invited Speaker: University of Chicago Department of Pediatrics "The Developing Brain is a Moving Target: The Cross Talk between Old and New Ideas Regarding Neonatal Hydrocephalus."
Pediatric Grand Rounds 1/14/12 Invited by Kwang-Sun Lee

Other Teaching Activities:

Organizer of Neonatology Research Seminar Series Cedars-Sinai Medical Center, 1999-2006

Organizer of Neonatology Clinical Research Conference Series Cedars-Sinai Medical Center, 2002-06

Co-Organizer of Neonatal Ethics Conference Series Cedars-Sinai Medical Center, 2000 to present
Program Director of Silbert Lectureship: *Ethics in Perinatology: The Next Millenium* January 14-15,
2000, Cedars-Sinai Medical Center

Mentor to Senior Resident in Clinical Research Project (Medela Bilibed Trial), Cedars-Sinai Medical Center, 1999 to 2003

Mentor to Perinatal Fellow in Clinical Research Project (Proteoglycan CSF Study), Cedars-Sinai Medical Center, 1999 to 2003

Co-Organizer with Dr. Charles Neisen of Developmental Neuroscience Journal Club, Cedars-Sinai Medical Center, 1999

Mentor to Senior Residents Research, 2001 to 2005

Primary liason between the Pediatric residency and the Neonatology division at Cedars-Sinai

Active Participant in Pediatric Resident Morning Report, ~once every other week, 1999 to 2002

Advisor to Four Pediatric Residents, 2000 to 2005

Topics in Neonatology Nursing Lectures (For Nurses and RTs in the NICU) Cedars-Sinai Medical Center -- approx 10 lectures/year, 1999 to 2003

Taught Second Year Medical Students pediatric component of Physical Diagnosis Class 2001 to 2004

Participated in orienting Medical Students to the well baby nursery as part of their third year clerkship in pediatrics 2001 to 2005

Primary scientific mentor for three neonatology fellows in basic and clinical research, 2000 -2003

Primary scientific mentor for UCLA medical student in basic research (Short Term Training Program) Summer 2003

Primary scientific mentor for Senior Pediatric Resident in basic research, September -October 2004

Teaching Activities since coming to UNM

Primary scientific mentor for Sandia Prep High School student in basic research, Summer 2007

Monthly Participant in Pediatric Resident Morning Report, 2007-ongoing

Topics in Neonatology Nursing Lectures (For newer neonatal nurses) UNM, 2007

Topics in Neonatology Nursing Lectures (For newer neonatal nurses) UNM, 2008

Multiple Lectures at Neonatal Perinatal Rounds Tuesday Mornings UNM 2006-present

Multiple Lectures at Neonatal Fellowship Core Curriculum UNM 2006-present

Taught Medical Students pediatric component of Physical Diagnosis Class at UNM 2007

Given ~1 lecture per week when on clinical service on clinical topic to Residents, NNPs, and fellows

OTHER PROFESSIONAL ACTIVITIES

1995-1999 Created and maintained a networked, multi-platform relational database system which permitted prospective data collection on all patients that are admitted to the University of Chicago NICU. Used to create admission notes, daily notes, and discharge summaries for all NICU patients.

1999 - 2001 Coordinator Neonatology Fellow Recruitment Effort, Division of Neonatology Cedars-Sinai Medical Center
2001 Interim Program Director, Neonatal-Perinatal Fellowship Program, Division of Neonatology Cedars-Sinai Medical Center

2002 - 2006 Fellowship Director, Neonatal-Perinatal Fellowship Program, Division of Neonatology Cedars-Sinai Medical Center

2001 - 2006 Coordinator, Neonatal Core Curriculum for Pediatric Residency and Neonatal-Perinatal Fellowship Program, Division of Neonatology Cedars-Sinai Medical Center

BIBLIOGRAPHY

Peer Reviewed Publications:

1. Olsen, C. A., **Krueger, R.**, and Schwartz, N. B. (1985) Deglycosylation of chondroitin sulfate proteoglycan by hydrogen fluoride in pyridine. *Anal. Biochem.* **146**, 232-237.
2. Schwartz, N. B., Habib, G., Campbell, S., D'Elvyn, D., Gartner, M., **Krueger, R.**, Olson, C., and Philipson, L. (1985) Synthesis and structure of proteoglycan core protein. *Federation Proc.* **44**, 369-372.
3. **Krueger, R. C.**, and Schwartz, N. B. (1987) An improved method of sequential Alcian Blue and ammoniacal silver staining of chondroitin sulfate proteoglycan in polyacrylamide gels. *Anal. Biochem.* **167**, 295-300.
4. Campbell, S. C., **Krueger, R. C.**, and Schwartz, N. B. (1990) Deglycosylation of chondroitin sulfate proteoglycan and derived peptides. *Biochem. J.* **29**, 907-914.
5. **Krueger, R. C.**, Fields, T. A., Hildreth, J. R., and Schwartz, N. B. (1990) Chick cartilage chondroitin sulfate proteoglycan core protein: I, Generation and characterization of peptides and specificity for glycosaminoglycan attachment. *J. Biol. Chem.* **265**, 12075-12087.
6. **Krueger, R.**, Fields, T. A., Mensch, J. R., and Schwartz, N. B. (1990) Chick cartilage chondroitin sulfate proteoglycan core protein: II, Nucleotide sequence of cDNA clone and localization of S103L epitope. *J. Biol. Chem.* **265**, 12088-12097.
7. **Krueger, R.**, Hennig, A. K., and Schwartz, N. B. (1992) Two immunologically and developmentally distinct chondroitin sulfate proteoglycans in embryonic chick brain. *J. Biol. Chem.* **267**, 12149-12161.
8. Hennig, A. K., **Krueger, R.**, Mangoura, D., and Schwartz, N. B. (1992) Chondroitin sulfate proteoglycan expression during neuronal development. *Cell and Molecular Biol.* **38**, 585-593.
9. Juul, S. E., **Krueger, R. C.**, Scofield, L., Hershenson, M. B., and Schwartz, N. B. (1995). Hyperoxia alone causes changes in lung proteoglycans and hyaluronan in neonatal rat pups. *Am. J. Respir. Cell Molecular Biol.* **13**, 629-638.

10. Domowicz, M., **Krueger, R. C.**, Li, H., Mangoura, D., Vertel, B. M., and Schwartz, N. B. (1996) The nanomelic mutation in the aggrecan gene is expressed in chick chondrocytes and neurons. *Internatl. J. Dev. Neurosci.* **14**, 191-201.
11. Kiurima, K., Warman, M. L., Krishnan, S., Domowicz, M., **Krueger, R. C.**, Deyrup, A., and Schwartz, N. B. (1998) A member of a new family of sulfate activation enzymes causes murine brachymorphism. *PNAS* **15**, 8681-8685.
12. **Krueger, Jr., R. C.**, Kiurima, K., and Schwartz, N. B. (1999) Completion of the Mouse Aggrecan Gene Structure and Identification of the Defect in the *cmd-Bc* Mouse as a Near Complete Deletion of the Murine Aggrecan Gene. *Mammalian Genome* **10**, 1119-1125.
13. **Krueger, Jr. R. C.**, Santore, M. T., Dawson, G., and Schwartz, N. B. (2001). Increased Extracellular Magnesium Modulates Proliferation in Fetal Neural Cells in Culture. *Brain Res Dev Brain Res* **127**, 99-109.
14. Alkalay, A.L., Galvis, S., Ferry, D.A., Simmons, C. F., **Krueger, Jr. R. C.** (2003) Hemodynamic changes in anemic premature infants: are we allowing the hematocrits to fall too low? *Pediatrics* **112(4)**, 838-845. (Article was cited in *World Medical Reviews in Perinatology* (2003) Yates, U.H., ed. **21(11)**, 3-4)
15. Sebald, E, **Krueger, R.**, King, LM, Cohn, DH, and Krakow, D. (2003) Isolation of a new member of the ADP-ribosylation like factor gene family, *ARL8*, from a cartilage cDNA library *Gene* **311**, 147-51.
16. **Krueger, Jr., R.C.** (2004) Use of a novel double-sandwich enzyme-linked immunosorbent assay method for assaying chondroitin sulfate proteoglycans that bear 3-nitrotyrosine core protein modifications, a previously unrecognized proteoglycan modification in hydrocephalus *Anal Biochem* **325**, 52-61.
17. Baud, O., Daire, J-L, Dalmaz, Y, Fontaine, R., **Krueger, R.C.**, Sebag, G, Evrard, P., GressensP., Verney, C. (2004) Gestational Hypoxia Induces White Matter Damage in Neonatal Rats: a New Model of Periventricular Leukomalacia *Brain Pathology* **14**, 1-10.
18. Kabos, P., Matundan, H., Zandian, M., Bertolotto, C., Davy, B. E., Robinson, M.L., Yu, J.S. and **Krueger, Jr., R.C.** (2004) Neural precursors express multiple chondroitin sulfate proteoglycans, including the lectican family *Biochem. Biophys. Res. Comm.* **318**, 955-963. (accepted from initial submission in 5 days without revisions)
19. Chow, L.C., Soliman, A., Zandian, M, Matundan, H. Danielpour, M., and **Krueger, Jr., R.C.** (2005) Accumulation of transforming growth factor- β 2 and nitrated chondroitin sulfate proteoglycans in cerebrospinal fluid correlates with poor neurologic outcome in preterm hydrocephalus *Biology of the Neonate* **88**, 1-11.
20. **Krueger, Jr., R.C.**, Wu, Hao, Zandian, M, Danielpour, M., Kabos, P., Yu, J.S. and Sun, Y. S. (2006) Neural progenitors populate the cerebrospinal fluid of preterm patients with hydrocephalus. *J Peds* **148**, 337-337.e7
21. Coskun, V., Wu, H., Bianchi, B., Tsao, S., Kim, K., Zhao, J., Biancotti, J. C., Hutnick, L., **Krueger, Jr., R. C.**, Fan, G., de Vellis, J., and Sun, Y. E. (2008) CD133+ neural stem cells in the ependyma of mammalian postnatal forebrain. *PNAS* **105** (3), 1026-1031.

Peer Reviewed Publications (In Preparation):

22. Zandian, M., Danielpour, M., Treolar, A., and **Krueger, Jr., R. C.** (2008) Molecular and biochemical characterization of aggrecan gene family chondroitin sulfate proteoglycan peptides in cerebrospinal fluid of preterm human infants with hydrocephalus: Implications for neural stem cell biology. *Goal is JBC*
23. Treolar, A., and **Krueger, Jr., R. C.** (2008) Brain aggrecan is a potent inhibitor of NOTCH signaling via the EGF domain: abnormal phenotypes in the neural progenitor pool in vitro and the brain in vivo in the *cmd* $-/-$ mouse brain. *Goal is JBC*

Chapters, Reviews and Symposium Articles:

1. Schwartz, N. B., Hennig, A. K., **Krueger, R.**, Krzystilik, M., Li, H., and Mangoura, D. Developmental expression of S103L cross-reacting proteoglycans in embryonic chick. (1993) In Fallon, J. F., Goetnick, P. F., Kelley, R. O., and Stocum, D. L. (eds) : "Limb Development and Regeneration" Wiley-Liss, New York. pp. 505-514.
2. Schwartz, N. B., Domowicz, M., **Krueger, R. C.**, Li, H., and Mangoura, D. (1996) Brain aggrecan (review). *Perspectives on Dev. Neurobiol.* **3**, 291-306.

3. Alkalay, A.L., Galvis, S., Ferry, D.A., **Krueger, Jr. R. C** Hemodynamics and Anemia in Premature Infants: How Low is Too Low? (2001) In Cabero, L. and Carrera, J.M. (eds) : "Perinatology 2001" Monduzzi Editore, Bologna, Italy. pp. 743-747.
4. Chow, L., Zandian, M., Harry Matundan, H., and **Krueger, Jr. R. C** Transforming Growth Factor- β 2 and Chondroitin Sulfate Proteoglycan in Human CSF, but not Transforming Growth Factor- β 1, Correlate with Hydrocephalus in Infants (2001) In Cabero, L. and Carrera, J.M. (eds) : "Perinatology 2001" Monduzzi Editore, Bologna, Italy. pp. 293-298.
5. Zandian, M., Harry Matundan, H., and **Krueger, Jr., RC** Assay for 3-Nitrotyrosine-Containing Large Chondroitin Sulfate Proteoglycans in CSF of Human Infants with Hydrocephalus: A Potential Prognostic Marker (2001) In Cabero, L. and Carrera, J.M. (eds) : "Perinatology 2001" Monduzzi Editore, Bologna, Italy. pp. 353-358.

Other Publications

1. **Krueger, Jr. R. C.** (1990) Investigations of the Structure and Function of Chondroitin Sulfate Proteoglycan in Embryonic Chick Brain and Cartilage *Doctoral Thesis* University of Chicago
2. **Krueger, Jr. R. C.** (1998) Personal Overachievement (music CD) Rockin'K Music 1998
3. **Krueger, Jr. R. C.** (1999) The Hepatitis B Vaccine: Is it safe for my baby? *Good Beginnings Newsletter* 2(2), 3
4. **Krueger, Jr. R. C.** (2003) The Troth Sessions (music CD) Rockin'K Music 2003

Abstracts:

1. **Krueger, R.,** and Schwartz, N. B. (1985) Characterization of immunogenic fragment from chick chondroitin sulfate proteoglycan. *Proc. VIII Internatl. Symp. Glycoconjugates*. **1**, 235.
2. **Krueger, R. C.,** Campbell, S. C., and Schwartz, N. B. (1986) Isolation of peptides derived from carbohydrate-rich regions of chondroitin sulfate proteoglycans. *Abstracts from Soc. Complex Carbohydrates Annual Meeting*. **1**, 20.
3. **Krueger, R.,** and Schwartz, N. B. (1987) Isolation of peptides from three functional domains of chick chondroitin sulfate proteoglycan. *Proc. IX Internatl. Symp. Glycoconjugates*. B54.
4. **Krueger, R.,** and Schwartz, N. B. (1988) Investigation of a large chondroitin sulfate proteoglycan from embryonic chick brain. *Abstracts from IV Internatl. Congress Cell Biol.* 197.
5. Kearns, A., **Krueger, R.,** Mensch, J., and Schwartz, N. B. (1989) Identification of S103L epitope in proteoglycan core protein. *Proc. Amer. Soc. Biochem. Molecular Biol. and Amer. Soc. Cell Biol.* 897
6. Hennig, A. K., Mangoura, D., Li, H., **Krueger, R.,** Domowicz, M., Mensch, J., and Schwartz, N. B. (1992) Developmental expression of S103L cross-reacting proteoglycans in embryonic chick. *Abstracts from The IV Intern. Conference on Limb Dev. & Regeneration* .
7. **Krueger, R. C.,** Juul, S. E., and Schwartz, N. B. (1993) Expression of a large chondroitin sulfate proteoglycan (CSPG) in developing lung exposed to hyperoxic injury. *Ped. Res.* **33**, 333A. (Poster symposium at the SPR in Washington, DC)
8. Jain, A, **Krueger, R. C.,** Ghai, K., Horwitz, A., Schreiber, M. D., Yousefzadeh, and Rosenfield, R.L... (1994) . Congenital Rickets in I-Cell Disease: Evidence for a role of vitamin D in human placental calcium transport *Ped. Res.* **35**, 314A.
9. **Krueger, R. C** and Schwartz, N. B. (1995). Chondroitin sulfate proteoglycan synthesis increases in neuronal cultures after glutamate excitotoxic injury. *Ped. Res.* **37**, 381A. (Platform presentation at SPR in San Diego, CA)
10. **Krueger, R. C.** and Schwartz, N. B. (1995). S103L-reactive chondroitin sulfate proteoglycan in neuronal migration. *Ped. Res.* **37**, 381A. (Platform presentation at SPR in San Diego, CA)
11. **Krueger, R. C.,** Juul, S. E., and Schwartz, N. B. (1995). Polyclonal antibody to hyaluronic acid binding domain of aggrecan recognizes large chondroitin sulfate proteoglycan (CSPG) in developing lung exposed to hyperoxic injury. *Ped. Res.* **37**, 339A. (Poster presentation at SPR in San Diego, CA)
12. **Krueger, R. C.,** Ozeran, J. D., and Lee, K. S. (1996). Relational database use in one neonatal intensive care unit and a proposal for a voluntary, national collaborative outcome and neonatal medical intervention reporting system using the internet. *Ped. Res.* **39**, 270A

13. **Krueger, R. C.**, Dawson, G., and Schwartz, N. B. (1997). Changes in brain aggrecan cspg synthesis after glutamate receptor stimulation, hypoxia, or induction of apoptosis. *Ped. Res* **41**, 292A
14. **Krueger, R. C.**, Santore, M. T., Dawson, G., and Schwartz, N. B. (1999). Increased extracellular magnesium increases cellular viability and cellular proliferation in primary cell culture of embryonic chick telencephalon: mechanisms of magnesium action. . *Ped. Res.* **45**, 55A (*Platform presentation at SPR in San Francisco, CA*)
15. **Krueger Jr., R. C.**, Huynh, H., Dawson, G., and Schwartz, N. B. (1999) Modulation of viability and proliferation in primary cell culture of embryonic chick telencephalon after exposure to increased extracellular magnesium: Role of PI3 Kinase in magnesium's action. *Society of Neuroscience Abstracts* **25**, 300 (*Accepted for Slide Presentation at October 1999 Society of Neuroscience Meeting in Miami, FLA*)
16. **Krueger, R. C.**, and Schwartz, N. B. (2000). Increased cell viability and proliferation in primary culture of E6 chick telencephalon after exposure to increased [Mg⁺⁺] or serum withdrawal: role of TGF- β J. *Invest. Med.* **48**, 27A (*Presentation at WSPR in Carmel, CA*)
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