

**K. REED CLARK, PhD  
CURRICULUM VITAE**

**Biographical Data**

Date of Birth: December 31, 1961

Marital Status: Married, two daughters

Business Address: Center for Gene Therapy  
Columbus Children's Research Institute  
Department of Pediatrics  
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**Education & Professional Experience**

B.S., Genetics, The Ohio State University, Columbus, OH.

Ph.D., Molecular Genetics, The Ohio State University, Columbus, OH.

1986-1992 Graduate Teaching Assistant in Molecular Genetics, The Ohio State University, Columbus, OH.

1991-1992 Lecturer, Introductory Genetics, The Ohio State University, Columbus, OH.

1992-1997 Post-Doctoral Fellow, Laboratory of Philip R. Johnson, M.D., Department of Pediatrics, Division of Molecular Medicine, The Ohio State University, Columbus, OH.

1997-2002 Assistant Professor, Department of Pediatrics, Division of Molecular Medicine, The Ohio State University, Columbus, OH.

2002-Present Associate Professor, Department of Pediatrics, Division of Molecular Medicine, The Ohio State University, Columbus, OH.

1998-Present Director, Columbus Children's Research Institute Viral Vector Core Laboratory, Columbus, OH.

2005-Present Associate Director, Center for Gene Therapy, Columbus Children's Research Institute, Columbus, OH.

### **Awards & Professional Societies**

Ohio State University Graduate Research Alumni Award

CHRF Research Forum Award

American Association for the Advancement of Science

American Society of Microbiology

American Society of Gene Therapy

Society for Pediatric Research

The WilBio Membership Association

### **Invited Lectures**

Gene Therapy: The Gene as Medicine. Denison University, Granville, Ohio, April 14, 1999.

Production of rAAV vectors and their use within the CNS. Safer Lecture, University of Pittsburgh, May 23, 2000.

The Use of Stable Cell Lines for High Titer Recombinant Adeno-Associated Virus Production. American Society of Gene Therapy, AAV Viral Vector Production Workshop 2000. Denver, Colorado, May 31, 2000.

rAAV Production. International Society of Nephrology, Forefronts in Nephrology Symposium Vail, Colorado, June 3, 2000.

High-Titer rAAV Production Using Stable Producer Cell Lines: Recent Progress. Gene Therapy Production Conference, Washington, D.C., March 16, 2001.

Stable Producer Cell Lines for Scalable rAAV Vector Production. Reference Materials for Adeno-Associated Viruses. Arlington, Virginia March 12, 2003.

Packaging Cell Lines for Scalable rAAV Production. University of North Carolina at Chapel Hill, Center for Gene Therapy, May 9, 2003.

Absence of Chromosomal Integration following Intramuscular Injection of an AAV Vaccine. CPMP Gene Therapy Expert Group Meeting, The European Agency for the Evaluation of Medicinal Products (EMA), London, England, February 23, 2004.

Absence of Integration Using an Intramuscular Inoculated AAV Vaccine. CPMP Gene Therapy Expert Group Meeting, Eurenthy International Clinical Gene Therapy Conference, Paul-Ehrlich-Institut, Langen, Germany, April 15-16, 2004.

Wild-Type and Recombinant AAV Biology - An Update. 8<sup>th</sup> (2005) Annual Meeting of the American Society of Gene Therapy, St. Louis, MO, June 1-5.

AAV Gene Vector Manufacturing: What is Feasible Now and in the Future? AAV Workshop, Monaco Round Table, Monte Carlo, June 24, 2006.

Muscular Dystrophy Using a Mini-Dystrophin Gene. Ninth Workshop on Novel Technologies and Gene Transfer for Hemophilia, CHOP, Philadelphia PA, February 22-23, 2008.

### **Committees & Service**

Director of CCRI Research Viral Vector Core Facility (1999 – present).

Chair of CCRI Institutional Biological and Chemical Safety Committee: Gene Therapy Expert Member (Member 1999-2005; Chair 2005 – present).

Current Member of The AAV Subcommittee on AAV Reference Stock Manufacturing. (2002-present).

External NIH Consultant for NIDDK Program Project Resubmission. February 11th 2002.

External Consultant for The Israel Science Foundation (ISF), 2003.

NIDDK Special Emphasis Study Section ZDK1 GRB-6 (01), entitled Molecular Therapy Core Centers, August 5-6, 2003, Baltimore, MD.

External Grant Reviewer for the Research Grants Council (RGC) of Hong Kong on Proposal HKU 7310/04M, 2004.

American Society of Gene Therapy Abstract Selection Committee, 2003.

Current Faculty Representative to the Society of Pediatric Research (SPR) Council for Fellow Basic & Clinical Award Selection Committee, 2004.

Current Member of the American Society of Gene Therapy (ASGT) Genetic Vaccine Selection Committee 2004-2007.

Current Chair of CCRI Institutional Biological and Chemical Safety Committee: (2005-present).

Current Member of CCRI cGMP Facility Committee (2005-present).

**Journal Reviewer** I have served as an ad-hoc reviewer for the following journals:

Journal of Virology  
Human Gene Therapy  
Nature Medicine  
Gene Therapy  
Molecular Therapy

Journal of Infectious Disease  
Nucleic Acids Research

### External Research Support

NIH/NINDS – Co-PI 1U54NS055958-01A1 07/01/2007 - 06/30/2011 Principal Investigator: Jerry R. Mendell Co-PI (30% effort) “Diverse Strategies to Correct the Dystrophin Gene Using Vascular Delivery”	\$852,468
NIH/NIAID/DAIDS 10/01/04 – 09/30/09 (20% effort) Principal Investigator: Philip R. Johnson, M.D. “HIV Vaccine Design and Development Teams”	\$3,840,998
NIH (1 P01 AI56354-01) 9/29/03 – 09/28/06 (30% effort) Co-PI. Principal Investigator: Philip R. Johnson, M.D. “Novel Prophylactic HIV Vaccines Based on rAAV Vectors”	\$481,590
International AIDS Vaccine Initiative (IAVI) 2/1/00 - 12/31/05 (20% effort) Co-PI. Principal Investigator: Philip R. Johnson, M.D. “International AIDS Vaccine Initiative”	\$200,000
NIH/NIAID (2-PO1-2I26607-10; renewal) 3/1/98 - 12/31/03 (20% effort) Principal Investigator: Philip R. Johnson, M.D. (subcontract) “Combined Vaccine Strategies for the Prevention of AIDS”	\$386,017
NIH (1 RO1 NS39071-01A1) 4/1/00 – 3/31/05 (5% effort) Principal Investigator: Thomas J. Sferra, M.D. “Gene Therapy for Lysosomal Storage Diseases”	\$200,000
NIH 7/1/00 – 6/30/01 (5% effort) Principal Investigator: David R. Brigstock, Ph.D. “Connective Tissue Growth Factor in Hepatic Fibrosis”	\$225,000
NIH (subcontract) 3/1/00 – 2/28/01 (10% effort) Principal Investigator: Roger P. Simon, M.D. (subcontract) “Molecular Mechanisms of Ischemia”	\$79,945

## Patents

“Methods and Materials for Recombinant Adeno-Associated Virus Production” BPC No. 03-0602-PC, Disclosure Date 2/26/03 (pending).

“Generation of Neutralizing Activity Against HIV-1 in Serum by Antibody Gene Transfer” BPC No. 03-0603-PC, Disclosure Date 7/23/02 (pending).

“Expression of Virus Entry Inhibitors and Recombinant AAV Therefore” BPC No. 04-0901-PC, Disclosure Date 9/20/04 (pending).

“Prevention and Treatment of HIV by AAV Mediated Gene Transfer” BPC No. 04-0201-PC, Disclosure Date 2/3/04 (pending).

“A High-Titer Recombinant Adeno-Associated Virus Production System Using Replication-Competent Rep-Cap Helper Functions” Invention Disclosure Form.

## Peer Reviewed Publications

1. Clark KR, Okuley JJ, Collins PD, and Sims TL. (1990). Sequence variability and developmental expression of S-alleles in self-incompatible and pseudo-self compatible *Petunia*. *The Plant Cell* 2, 815-826.
2. Clark KR and Sims TL. (1994) The S-ribonuclease gene of *Petunia hybrida* is expressed in nonstylar tissue, including immature anther. *Plant Physiology* 106, 25-36.
3. Clark KR, Okuley JJ, and Sims TL. (1995) Complete nucleotide sequence of the S1-RNase gene of *Petunia hybrida*. *Plant Physiology* 107, 307-308.
4. Clark KR, Voulgaropoulou F, Fraley DM, and Johnson PR. (1995) Cell lines for the production of recombinant adeno-associated virus. *Human Gene Therapy* 6, 1329-1341.
5. Clark KR, Voulgaropoulou F, and Johnson PR. (1996) A stable cell line carrying adenovirus-inducible rep and cap genes allows for infectivity titration of adeno-associated virus vectors. *Gene Therapy* 3, 1124-1132.
6. Clark KR, Sferra TJ, and Johnson PR. (1997) Recombinant adeno-associated viral vectors mediate long-term expression in muscle. *Human Gene Therapy* 8, 659-669.
7. Nahman NS, Clark KR, Sferra TJ, Urban KE, Troike AE, Kronenberger J, and Sedmak DD. (1998) Successful DNA transfer in cultured human mesangial cells using replication deficient recombinant adenovirus. *Journal of Investigative Medicine*, 1998 46: 204-209.

8. Lo WD, Qu G, Sferra TJ, Clark KR, Chen R, Johnson PR. (1999). Adeno-associated virus mediated gene transfer to the brain: duration and modulation of expression. *Human Gene Therapy* 10, 201-213.
9. Liu X, Clark KR, and Johnson PR. (1999). Production of recombinant adeno-associated virus vectors using a packaging cell line and a hybrid recombinant adenovirus. *Gene Therapy* 6, 293-299.
10. Clark KR, Liu X, McGrath JP, and Johnson PR. (1999). Highly Purified Recombinant Adeno-associated Virus Vectors are Biologically Active and Free of Detectable Wild-Type Viruses. *Human Gene Therapy* 10, 1031-1039.
11. Carson WE, Yu H, Dierksheide J, Pfeffer K, Bouchard P, Clark KR, Durbin J, Baldwin AS, Peschon J, Johnson PR, Ku G, Baumann H, and Caligiuri MA. (1999). A Fatal Cytokine-Induced Systemic Inflammatory Response Reveals a Critical Role for NK Cells. *Journal of Immunology* 162, 4943-4951.
12. Clark KR, Sferra TJ, Lo W, Qu G, Chen R, and Johnson PR. (1999). Gene Transfer into the CNS using Recombinant Adeno-Associated Virus: Analysis of Vector DNA Forms Resulting in Sustained Expression. *Journal of Drug Targeting* 7, 269-283.
13. Sferra TJ, Qu G, McNeely D, Rennard R, Clark KR, Lo WD, Johnson PR. (2000). Recombinant Adeno-Associated Virus-Mediated Correction of Lysosomal Storage Within the Central Nervous System of the Adult Mucopolysaccharidosis Type VII Mouse. *Human Gene Therapy* 11, 507-519.
14. Liu X, Voulgaropoulou F, Chen R, Johnson PR, and Clark KR. (2000). Selective Rep-Cap Gene Amplification as a Mechanism for High-Titer Recombinant AAV Production from Stable Cell Lines. *Molecular Therapy* 2, 394-403.
15. Su B, Mitra S, Gregg H, Flavahan S, Chotani MA, Clark KR, Goldschmidt-Clermont PJ, Flavahan NA. (2001). Redox Regulation of Vascular Smooth Muscle Differentiation. *Circulation Research* 89, 39-46.
16. Lewis A, Chen R, Montefiori DC, Johnson PR, and Clark KR. (2002). Generation of serum neutralizing activity against HIV-1 by antibody gene transfer. *Journal of Virology* 76, 8769-8775.
17. Reber KM, Su BY, Clark KR, Pohlman DL, Miller CE, Nowicki PT. (2002). Development expression of eNOS in postnatal swine mesenteric artery. *Am J Physiol Gastrointest Liver Physiol* 283:G1328-1335.
18. Sun Y, Jin K, Clark KR, Peel A, Mao XO, Chang Q, Simon RP, Greenberg DA. (2003). Adeno-Associated Virus-Mediated Delivery of *BCL-w* Gene Improves Outcome after Transient Focal Cerebral Ischemia. *Gene Therapy* 10, 115-122.

19. Schnepf BC, Clark KR, Klemanski DL, Pacak CA, and Johnson PR. (2003). Genetic fate of recombinant adeno-associated virus vector genomes in muscle. *Journal of Virology* 77, 3495-3504.
20. Wang C, Wang CM, Clark KR, and Sferra TJ. (2003). Recombinant AAV Serotype 1 Transduction Efficiency and Tropism in the Murine Brain. *Gene Therapy* 10, 1528-1534.
21. Chotani MA, Mitra S, Su BY, Flavahan S, Eid AH, Clark KR, Montague CR, Paris H, Handy DE, Flavahan NA. (2004). Regulation of alpha2-Adrenoceptors in Human Vasculature Smooth Muscle Cells. *American Journal of Physiology: Heart & Circulatory Physiology* 286:H59-67.
22. van den Pol AN, Acuna-Goycolea C, Clark KR, Ghosh PK. (2004). Physiological Properties of Hypothalamic MCH Neurons Identified with Selective Expression of Reporter Gene after Recombinant Virus Infection. *Neuron* 42, 635-652.
23. Johnson PR, Schnepf BC, Connell MJ, Rohne D, Robinson S, Krivulka GR, Lord CI, Zinn R, Montefiori DC, Letvin NL, and Clark KR. (2005). Novel Adeno-Associated Virus Vector Vaccine Restricts Replication of Simian Immuno-deficiency Virus in Macaques. *Journal of Virology* 79, 955-965.
24. Chen C-L, Jensen RL, Schnepf BC, Connell MJ, Shell R, Sferra TJ, Bartlett JS, Clark KR and Johnson PR (2005). Molecular Characterization of Adeno-Associated Viruses in Children. *Journal of Virology* 79, 14781-14792.
25. Schnepf BC, Jensen RL, Chen C-L, Johnson PR, and Clark KR (2005). Characterization of Adeno-Associated Virus Genomes Isolated from Human Tissues. *Journal of Virology* 79, 14793-14803.
26. Rodino-Klapac LR, Janssen PM, Montgomery CL, Coley BD, Chicoine LG, Clark KR, and Mendell JR (2007). A translational approach for limb vascular delivery of the micro-dystrophin gene without high volume or high pressure for treatment of Duchenne muscular dystrophy. *Journal of Translational Medicine* 5, 45.

### **Book Chapters and Reviews**

1. Clark KR and Johnson PR. (2001). Gene Delivery for Vaccines for Infectious Diseases. *Current Opinion in Molecular Therapeutics* 3, 375-384.
2. Clark, KR. (2002). Recent advances in recombinant adeno-associated virus vector (rAAV) production. *Kidney International* 61, 9-15.
3. Schnepf B and Clark KR. (2002). Highly purified recombinant adeno-associated virus vectors. Preparation and quantitation. *Methods Mol Med* 69, 427-443.

4. Mendell JR, Clark KR (2006). Challenges for gene therapy for muscular dystrophy. *Curr Neurol Neurosci Rep.* 6, 47-56.
5. Clark KR. Preparation and Quantitation of Large-scale Recombinant AAV Vector Stocks Using Packaging Cell Lines. (Methods in Molecular Medicine, AAV Protocols, 2nd Edition) (submitted).

### Abstracts

1. Sims TL, Clark KR, Okuley JJ, and Collins PD. Molecular aspects of gametophytic self-incompatibility in *Petunia hybrida*. FASEB Summer Research Conference, Plant Gene Expression, 1989.
2. Sims TL, Clark KR, Okuley JJ, and Collins PD. Characterization of S-locus genes from *Petunia hybrida*. *Journal of Cellular Biochemistry* 13D p 289, 1989.
3. Clark KR, Okuley JJ, Collins PD, and Sims TL. Isolation of S-locus genes from *Petunia hybrida*, in *Plant Reproduction: From Floral Induction to Pollination*, E. Lord and G. Bernier, eds., University of California-Riverside, 12th Annual Symposium in Plant Physiology, p 184, 1989.
4. Okuley JJ, Clark KR, Collins PD, and Sims TL. Characterization of S-locus alleles in *Petunia*. *Plant Physiology* 93 p 4, 1990.
5. Sims TL, Clark KR, Okuley JJ, and Collins PD. Self-incompatibility genes of *Petunia*. *Journal of Cellular Biochemistry* 14E p 358, 1990.
6. Lo WD, Chen R, Qu G, Sferra TJ, Clark KR, Johnson PR. Recombinant adeno-associated virus (rAAV) produces sustained transduction of murine CNS neural cells. Annual Meeting of the Society for Neuroscience, 1996.
7. Sferra TJ, Clark KR, Qu G, Lo W, and Johnson PR. Persistence of gene expression following recombinant AAV transduction of the central nervous system. Cold Spring Harbor Gene Therapy Meeting, 1996.
8. Clark KR, Sferra TJ, and Johnson PR. Persistent, high-level reporter gene expression in mouse skeletal muscle using a recombinant AAV vector. Cold Spring Harbor Gene Therapy Meeting, 1996.
9. Clark KR, Voulgaropoulou F, and Johnson PR. Development of rAAV packaging cell lines. 15th annual meeting of the American Society for Virology, 1996 (Oral presentation).
10. Philpott JR, Clark KR, and Johnson PR. rAAV vectors reconstituted with the AAV rep gene. Keystone Symposia on Molecular and Cellular Biology, 1997.

11. Liu XL, Clark KR, and Johnson PR. Generation of recombinant adeno-associated virus (rAAV) from an adenoviral vector. Keystone Symposia on Molecular and Cellular Biology, 1997.
12. Clark KR, Sferra TJ, and Johnson PR. Efficient Transduction of Mouse Skeletal Muscle by Recombinant AAV. Keystone Symposia on Molecular and Cellular Biology, 1997..
13. Johnson PR, Sferra TJ, and Clark KR. The in vivo biology of rAAV vectors. Keystone Symposia on Molecular and Cellular Biology, 1997.
14. Qu G, Sferra TJ, Clark KR, Chen R, Lo WD, and Johnson PR. The effect of hydroxyurea on recombinant adeno-associated virus mediated transduction efficiency in neuronal cells. Keystone Symposia on Molecular and Cellular Biology, 1997.
15. Nahman Jr NS, Kronenberger J, Urban KT, Clark KR, Johnson PR. Successful DNA transfer in cultured human mesangial cells with replication deficient recombinant adenovirus. AFMR Research Conference, 1997.
16. Rosario M, Clark KR, Sferra T, Johnson P, Buskin J, Hauschka S, and Burghes A. Restoration of dystrophin production in mdx mice: an antisense approach using an adeno-associated viral vector for delivery. Keystone Symposia on Molecular and Cellular Biology, 1997.
17. Clark KR, Sferra T, and Johnson PR. Efficient transduction of mouse skeletal muscle by a recombinant adeno-associated viral vector. American Society for Virology, 16th annual meeting 1997.
18. Nahman Jr NS, Holycross BJ, Sferra T, Clark KR, Urban, KE, Troike AE, Kronenberger J. Adenoviral-Mediated in vivo transduction of the kidney in rats with experimental nephrotic syndrome. American Society of Nephrology, 1997.
19. Nahman Jr NS, Kronenberger J, Sferra TJ, Clark KR. Transcriptional activation of the TGF- $\beta$  gene by angiotensin II: Implications for fibronectin biosynthetic pathways in human mesangial cells. American Society of Nephrology, 1997.
20. Nahman Jr NS, Kronenberger J, Sferra TJ, Clark KR. Adenoviral transduction of cultured human mesangial cells: Dose dependence, reporter gene kinetics and in vitro durability. American Society of Nephrology, 1997.
21. Clark KR and Johnson PR. Efficient and rapid purification of recombinant adeno-associated virus by perfusion chromatography. American Society of Gene Therapy, 1998 (oral presentation).
22. Clark KR and Johnson PR. rAAV vectors as an AIDS vaccine. American Society of Gene Therapy, 1998.

23. Sferra TJ, Rennard R, McNeely D, Clark KR, and Johnson PR. Use of a recombinant adeno-associated virus to correct hepatic lysosomal storage in mucopolysaccharidosis type VII mice. Children's Research 20<sup>th</sup> Annual Research Forum, Columbus, Ohio, 1999.
24. Clark KR, Liu X, Johnson PR. Optimized production and titration methods for high-titer rAAV synthesis using stable producer cell lines. American Society of Gene Therapy, 1999.
25. Clark KR, Schnepf B, Walker C, Connell MJ, Robinson S, Letvin N, and Johnson PR. A single dose, adeno-associated virus vectors SIV vaccine elicits long-lived immune responses in macaques. 17<sup>th</sup> Annual Symposium on Nonhuman Primates Models for AIDS, 1999.
26. Clark KR, Schnepf B, Connell MJ, Robinson S, Walker CW, Letvin NL, and Johnson PR. American Society of Pediatrics, 2000. A Single Dose Adeno-Associated Virus Vector Expressing SIV genes Elicits Long-Lived Immune Responses in Macaques (Oral Presentation).
27. Chotani MA, Mitra S, Su BY, Flavahan S, Paris H, Handy DE, Clark KR, Flavahan NA. Regulation of alpha2C-Adrenergic Receptor Expression in Vascular Smooth Muscle Cells. FASAB Meeting 2000.
28. Clark KR, Schnepf B, and Johnson PR. High-throughput Screening and Purification Methods for Large-Scale Recombinant Adeno-Associated Virus Vector Production Using Stable Producer Cell Lines. American Society of Gene Therapy, 2001.
29. Clark KR, Lewis AD, Chen R, Montefiori DC, and Johnson PR. *In vivo* Production of Anti-HIV-1 Neutralizing Antibody from Mouse Muscle Using a Recombinant Adeno-Associated Virus Vector. American Society of Gene Therapy, 2001 (Oral Presentation).
30. Schnepf B, Klemanski D, Clark KR, and Johnson PR. Characterization of Episomal Recombinant Adeno-Associated Virus Genomes from Muscle Tissue. American Society of Gene Therapy, 2001.
31. Johnson PR, Schnepf BC, Montefiori DC, Letvin NL, and Clark KR. Novel SIV/HIV Vaccines Based on Recombinant Adeno-associated Virus Vectors. American Society of Gene Therapy, 2001.
32. Wilson AK, Clark KR, Moussad E, Sferra TJ, Brigstock DR. Novel Models of CTGF transgenesis *in vivo*: Recombinant adeno-associated viral (rAAV) mediated delivery of the CTGF gene. First International Workshop on CCN proteins, 2001.
33. Wilson AK, Clark KR, Moussad E, Sferra TJ, Brigstock DR. Connective tissue growth factor (CTGF) in liver fibrosis: Effects of CTGF on hepatic stellate cells and development of a rAAV-mediated delivery system for intra-hepatic CTGF gene

- delivery. Pediatric Academic Societies Meeting, 2001.
34. Schnepf BS, Klemanski D, Pacak C, Clark KR, and Johnson PR. AAV vector genomes persist predominately as episomes in mouse skeletal muscle. American Society of Gene Therapy, 2002.
  35. Chen CL, Clark KR, Chen R, Schnepf BS, and Johnson PR. Generation of stable 293 cell lines for the production of rAAV vectors. American Society of Gene Therapy, 2002.
  36. Clark KR, Chen CL, Fasano R, Pacak C, and Johnson PR. Production of rAAV vectors with increased potency from stable cell lines. American Society of Gene Therapy, 2002.
  37. Longman-Jacobsen N, Chung EK, Yang Y, Clark R, and Yu CY. Trans-species polygenic variation of complement C4 and RCCX modular structures in Rhesus Macaques (*Macaca mulatta*) and humans. XIXth International Complement Workshop, 2002.
  38. Clark KR, Chen R, and Johnson PR. Molecular Adjuvants Host Immune Responses Following rAAV Mediated Gene Delivery. 2003 Pediatric Society Annual Meeting, Seattle, WA.
  39. Johnson PR, Schnepf BC, Turin L, Connell MJ and Clark KR. Pre-clinical Evaluation of a Novel HIV Vaccine Based on an Adeno-associated Virus Vector. 2003 Pediatric Society Annual Meeting, Seattle, WA.
  40. Jacobsen N, Chung EK, Yang Y, Clark KR, Johnson PR, and Yu CY. Rhesus Macaque as a Nonhuman Primate Model to Study Complement C4 Gene and Protein Diversities. 2003 Pediatric Society Annual Meeting, Seattle, WA.
  41. Rachfal AW, Clark KR, Luquette M, and Brigstock DR. rAAV-Mediated CTGF Gene Overexpression in Skeletal Muscle in vivo is Associated with Muscle Fiber Atrophy. 2003 Pediatric Society Annual Meeting, Seattle, WA.
  42. Johnson PR, Schnepf BC, Turin L, Connell MJ and Clark KR. Pre-clinical Evaluation of a Novel HIV Vaccine Based on an Adeno-associated Virus Vector. 6<sup>th</sup> (2003) Annual Meeting of the American Society of Gene Therapy, Washington, DC.
  43. Schnepf BC, Soult MC, Kelly E, Munson K, Clark KR, and Johnson PR. Genome-wide Amplification for the Detection of Integrated rAAV-2 Vector DNA in Rabbit Tissues. 6<sup>th</sup> (2003) Annual Meeting of the American Society of Gene Therapy, Washington, DC.
  44. Chen CL, Chen R, Johnson PR, and Clark KR. Use of a Recombinant Adenovirus Expressing the AAV-2 Rep52 Helicase To Enhance Vector Potency from Stable rAAV Producer Cell Lines. 6<sup>th</sup> (2003) Annual Meeting of the American Society of

Gene Therapy, Washington, DC.

45. Clark KR, Chen R, and Johnson PR. Molecular Adjuvants as a Strategy To Augment Host Immune Responses Following rAAV Mediated Genetic Vaccination. 6<sup>th</sup> (2003) Annual Meeting of the American Society of Gene Therapy, Washington, DC.
46. Schnepf BC, Chen C-L, Jensen RL, Clark KR, Johnson PR. Genetic Structure of Adeno-Associated Virus DNA in Human Tissues. 7<sup>th</sup> (2004) Annual Meeting of the American Society of Gene Therapy, Minneapolis, MN.
47. Chen C-L, Jensen RL, Schnepf BC, Clark KR, Johnson PR. Characterization of Adeno-Associated Virus Sequences in Human Tissues. 7<sup>th</sup> (2004) Annual Meeting of the American Society of Gene Therapy, Minneapolis, MN.
48. Jensen RL, Schnepf BC, Johnson PR, Clark KR. Adeno-Associated Virus Infection in Non-human Primates. Xth Parvovirus Workshop 2004. St. Petersburg, FL, September 8-12, 2004.
49. Clark KR, Chen C-L, Jensen RL, Schnepf BC, Johnson PR. Characterization of Wild-Type Adeno-Associated Viruses Isolated from Human Tissues. Xth Parvovirus Workshop 2004. St. Petersburg, FL, September 8-12, 2004.
50. Johnson PR, Schultz AM, Koff WC, Wyand MS, Anklesaria P, Schnepf BC, Clark KR. RAAV Vectors as Novel HIV-1 Vaccine Candidates: Immunogenicity in Non-human Primates. Xth Parvovirus Workshop 2004. St. Petersburg, FL, September 8-12, 2004.
51. Schnepf BC, Chen C-L, Jensen RL, Clark KR, Johnson PR. Molecular Structure of Adeno-Associated Viral DNA in Human Tissues. Xth Parvovirus Workshop 2004. St. Petersburg, FL, September 8-12, 2004.
52. Clark KR, Zhang J, Montefiori DC, and Johnson, PR. *In vivo* Production of Anti-HIV-1 Neutralizing Antibody from Rhesus Macaque Muscle Using a Recombinant Adeno-Associated Virus Vector. 8<sup>th</sup> (2005) Annual Meeting of the American Society of Gene Therapy, St. Louis, MO, June 1-5, 2005.
53. Gushima T, Bowen DG, Woollard DJ, Newton K, Lubert EJ, Clark KR, Johnson PR, McKeating JA and Walker CM. Recombinant Adeno-Associated Virus (AAV) Vectors as a Vaccine for Hepatitis C virus. The 12th International Symposium on HCV. Montreal, Canada Oct 2-6, 2005.

### **Student and Post-Doctoral Trainees**

Dr. Pascal Fuchshuber (James Cancer Research Institute Fellow). Development of a tetracycline inducible gene expression system for regulated expression of several novel oncogenes. (1998).

Robert L. Pompa (OSU medical student). Mr. Pompa received a Samuel J. Roessler Memorial Scholarship to perform a research project entitled “ Development of Additional Adeno-Associated Virus Serotypes for Gene Therapy” in my laboratory (1998).

Mr. Ross Fasano (OSU medical student). Mr. Fasano developed a regulated rAAV production system using the tetracycline inducible operon system. (1999-2001).

Dr. Xingluo Liu. Graduate student who developed a novel rAAV production strategy using recombinant adenovirus/rAAV hybrid vectors. (1999-2003).

Dr. Bruce Schnepf. Post-Doctoral fellow with whom I collaborated closely on the design of optimized HIV vaccine vectors and on defining *in vivo* forms of rAAV genome persistence in the human host. (2000-2005).

Dr. Chun-Liang Chen. Post-Doctoral fellow who developed improved rAAV vectors with increased *in vivo* potency using an AAV Rep52/40 over-expression strategy. (2002-2004).

Ms. Shu-wen Huang. Graduate student who developed a novel HIV-1 fusion inhibition delivery reagent. (2002-2006). She received her Master’s of Science in March 2006 from The Ohio State University.

Mr. Jianchao Zhang. Graduate student who has developed a novel reverse immunization strategy using *in vivo* antibody gene delivery. (2001-present).

Dr. Clifford Beall. Post-Doctoral fellow who is developing novel VERO based rAAV cell lines production strategies. (2003-present).

Mr. Nathaniel Walton. Graduate student exploring rAAV mediated exon skip therapeutics for DMD. (2005-present).