

## BIOGRAPHICAL SKETCH

NAME:		POSITION TITLE:	
Katherine D. Ryman		Assistant Professor of Microbiology and Immunology	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Surrey, Guildford, U.K.	B.Sc.	1991	Microbiology
University of Surrey, Guildford, U.K.	Ph. D.	1995	Virology
University of Texas, Galveston, TX	-----	-----	Virology
University of North Carolina, Chapel Hill, NC	Post-Doctoral Res. Assoc.	1995-2000	Virology

### A. POSITIONS AND HONORS

#### Positions and Employment

- 1988 - 1990 Industrial Trainee, Ciba-Geigy Pharmaceuticals, Advanced Drug Delivery Research, U.K.  
1991 - 1991 Praktikant (Technician), Ciba-Geigy AG, Drug Delivery Research, Basel, Switzerland  
1991 - 1993 Graduate Demonstrator University of Surrey, Guildford, U.K.  
1995 - 2000 Postdoctoral Research Associate, University of North Carolina at Chapel Hill, Chapel Hill, NC  
2000 - 2002 Research Assistant Professor, University of North Carolina at Chapel Hill, Chapel Hill, NC  
2002 - Assistant Professor, Louisiana State University Health Sciences Center, Shreveport, LA  
2002 - Member of the Feist-Weiller Cancer Center, LSUHSC, Shreveport, LA  
2002 - Member of the LA Gene Therapy Consortium, LSUHSC Gene Therapy Program

#### Other Experience and Professional Memberships

- 2000 - American Society for Microbiology.  
1993 - American Society for Virology.  
2002 - International Society for Interferon and Cytokine Research.  
2002 - American Society for Tropical Medicine and Hygiene.  
2002 - *Ad hoc* reviewer for *Proceedings in National Academy of Sciences, U.S.A.*  
2002 - Member of LSUHSC Institutional Animal Care and Use Committee.  
2002 - Associate member of Graduate Committee.

### B. SELECTED PEER-REVIEWED PUBLICATIONS (in chronological order)

- Cao, J.X., H. Ni, M.R. Wills, G.A. Campbell, B.K. Sil, **K.D. Ryman**, I. Kitchen, and A.D.T. Barrett. (1995). Passage of Japanese encephalitis virus in HeLa cells results in attenuation of virulence in mice. *Journal of General Virology* **76**:2757-64.
- Wang, E., **K.D. Ryman**, A.D. Jennings, D.J. Wood, F. Taffs, P.D. Minor, P.G. Sanders, and A.D.T. Barrett. (1995). Comparison of the genomes of the wild-type French viscerotropic strain of yellow fever virus with its vaccine derivative French neurotropic vaccine. *Journal of General Virology* **76**:2749-55.
- Ryman, K.D.**, H. Xie, T.N. Ledger, G.A. Campbell, and A.D.T. Barrett. (1997). Antigenic variants of yellow fever virus with an altered neurovirulence phenotype in mice. *Virology* **230**:376-80.
- Ryman, K.D.**, T.N. Ledger, R.C. Weir, J.J. Schlesinger, and A.D.T. Barrett. (1997). Yellow fever virus envelope protein has two discrete type-specific neutralizing epitopes. *Journal of General Virology* **78**:1353-6.
- Trgovcich, J., **K.D. Ryman**, P. Extrom, J.C. Eldridge, J.F. Aronson, and R.E. Johnston. (1997). Sindbis virus infection of neonatal mice results in a severe stress response. *Virology* **227**:234-8.
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Wang, H., A.D. Jennings, **K.D. Ryman**, C.M. Late, E. Wang, H. Ni, P.D. Minor, and A.D.T. Barrett. Genetic variation among strains of wild-type yellow fever virus from Senegal. *Journal of General Virology* **78**:1349-52.

**Ryman, K.D.**, T.N. Ledger, G.A. Campbell, S.J. Watowich, and A.D.T. Barrett. (1998). Mutation in a 17D-204 vaccine substrain-specific envelope protein epitope alters the pathogenesis of yellow fever virus in mice. *Virology* **244**:59-65.

Xie, H., **K.D. Ryman**, G.A. Campbell, and A.D.T. Barrett. (1998). Mutation in NS5 protein attenuates mouse neurovirulence of yellow fever 17D vaccine virus. *Journal of General Virology* **79**:1895-9.

Klimstra, W.B., **K.D. Ryman**, and R.E. Johnston. (1998). Adaptation of Sindbis virus to BHK cells selects for use of heparan sulfate as an attachment receptor. *Journal of Virology* **72**:7357-66.

Dunster, L.M., H. Wang, **K.D. Ryman**, B.R. Miller, S.J. Watowich, P.D. Minor, and A.D.T. Barrett. (1999). Molecular and biological changes associated with HeLa cell attenuation of wild-type yellow fever virus. *Virology* **261**:309-18.

Klimstra, W.B., **K.D. Ryman**, K.A. Bernard, K.B. Nguyen, C.A. Biron and R.E. Johnston. (1999). Infection of neonatal mice with Sindbis virus results in a systemic inflammatory response syndrome. *Journal of Virology* **73**:10387-10398.

Ni, H., **K.D. Ryman**, H. Wang, M.F. Saeed, R. Hull, D. Wood, P.D. Minor, S.J. Watowich, and A.D.T. Barrett. (2000). Interaction of yellow fever virus French neurotropic vaccine strain with monkey brain: Characterization of monkey brain membrane receptor escape variants. *Journal of Virology* **74**:2903-6.

**Ryman, K.D.**, W.B. Klimstra, K.B. Nguyen, C.A. Biron and R.E. Johnston. (2000). Alpha/beta interferon protects adult mice from fatal Sindbis virus infection and is an important determinant of cell and tissue tropism. *Journal of Virology* **74**:3366-3378.

Smit, J.M., W.B. Klimstra, **K.D. Ryman**, R. Bittman, R.E. Johnston and J. Wilschut. (2001). PE2 cleavage mutants of Sindbis virus: Correlation between viral infectivity and pH-dependent membrane fusion activation of the spike heterodimer. *Journal of Virology* **75**:11196-11204.

**Ryman, K.D.**, L. White, R.E. Johnston and W.B. Klimstra. (2002). Effects of PKR/RNase L-dependent and alternative antiviral pathways upon Alphavirus replication and pathogenesis. *Viral Immunology*, **15**:53-76.