

JAMES PAUL BRUZIK

Date of Birth: August 26, 1964 Teaneck, New Jersey

Citizenship: U.S.A.

Address: Case Western Reserve University School of Medicine
Center for RNA Molecular Biology
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Education:

Harvard University - Postdoctoral Fellow	1991-1993
Department of Biochemistry and Molecular Biology	
Yale University - Ph.D. in Molecular Biophysics and Biochemistry	1990
Case Western Reserve University - B.A. in Biochemistry and Chemistry	1986

Honors and Awards:

Burroughs Wellcome Fund New Investigator Award in Molecular Parasitology	1995-1999
Jane Coffin Childs Memorial Fund for Medical Research Postdoctoral Fellowship	1991-1993
Yale University - Bass Foundation Scientific Writing Tutor	1988 & 1989
Yale University - John F. Enders Research Award	1988
B.A. Magna Cum Laude	1986
Western Reserve Scholar	
American Cancer Society - Joseph S. Silber Fellowship	1985

Academic Appointments and Training:

Associate Professor	2004-present
Case Western Reserve University School of Medicine	
Division of General Medical Sciences (Primary)	
Center for RNA Molecular Biology	
Department of Biochemistry (Secondary)	
Associate Professor	2003-2004
Case Western Reserve University School of Medicine	
Division of General Medical Sciences (Primary)	
Center for RNA Molecular Biology	
Department of Mol. Biology and Microbiology (Secondary)	
Assistant Professor	2001-2003
Case Western Reserve University School of Medicine	
Division of General Medical Sciences (Primary)	
Center for RNA Molecular Biology	
Department of Mol. Biology and Microbiology (Secondary)	
Assistant Professor	1994-2003
Case Western Reserve University School of Medicine	
Department of Mol. Biology and Microbiology	

Postdoctoral Fellow	1991-1993
Jane Coffin Childs Memorial Fund for Medical Research	
Harvard University	
Advisor - Dr. Tom Maniatis	
Field: RNA Trans-Splicing in Mammals	
Graduate Student	1986-1990
Yale University	
Advisor - Dr. Joan A. Steitz	
Field: RNA Trans-Splicing	
Undergraduate Research	1984-1986
Case Western Reserve University	
Advisor - Dr. Pieter L. deHaseth	
Field: <i>E. coli</i> Transcription Initiation	
Student Intern	1984
International Paper Company	
Biochemical Research Group	
Field: Fusiform Rust Disease of Southern Pines	

Memberships: American Society for Biochemistry and Molecular Biology
The RNA Society

Research Support:

NIH R01 GM54204
"Role of SR proteins in *trans*-splicing"
2003-2006, \$800,000 direct costs, \$1,224,000 total costs

NIH R01 GM54204-05S1
"Role of SR proteins in *trans*-splicing"
2001-2002, \$42,342 direct costs, \$64,783 total costs

NIH R01 GM54204
"Role of SR proteins in *trans*-splicing"
1996-2001, \$727,674 direct costs, \$1,085,194 total costs

Burroughs Wellcome Fund
New Investigator Award (0523)
"Examination of the role of protein factors in *trans* splicing in nematodes and trypanosomatids"
1995-1999, \$180,000 total

National Science Foundation
Multi-User Biological Equipment Award (BIR-9419859)
Phosphorimager purchase
co-PI's - J. Bruzik, T. Nilsen, J. Wise and J. Gott
1995, \$30,500 (50% matching funds)

American Cancer Society, Ohio Division, Inc.
Pilot Study Grant
"Protein factors involved in *trans*-splicing"
1994-1995, \$15,000

Ohio Board of Regents

Research Initiation Grant
"The role of SR proteins in RNA *trans*-splicing"
1994-1995, \$5,000

Case Western Reserve University School of Medicine
Center for Molecular Parasitology
Department of Molecular Biology and Microbiology
Start-up funds
1994, \$125,000

Publications:

S. Furuyama and J.P. Bruzik, Trans-spliceosome assembly, in preparation.

S. Furuyama and J.P. Bruzik, Activation of regulated 5' splice sites, in preparation.

L. A. Boukis, N. Liu, S. Furuyama and J.P. Bruzik (2004). Ser/Arg-rich protein-mediated communication between U1 and U2 small nuclear ribonucleoprotein particles. *J. Biol. Chem.* **279**, 29647-29653.

S. Furuyama and J.P. Bruzik (2002). Multiple roles for SR proteins in trans-splicing. *Mol. Cell. Biol.* **22**, 5337-5346.

J.R. Sanford and J.P. Bruzik (2001). Regulation of SR protein localization during development. *Proc. Natl. Acad. Sci. USA.* **98**, 10184-10189.

L. A. Boukis and J.P. Bruzik (2001). Functional selection of splicing enhancers that activate *trans*-splicing *in vitro*. *RNA* **7**, 793-805.

J.R. Sanford and J.P. Bruzik (1999). Developmental regulation of SR protein phosphorylation and activity. *Genes & Development* **13**, 1513-1518.

J.R. Sanford and J.P. Bruzik (1999). SR proteins are required for nematode *trans*-splicing *in vitro*. *RNA* **5**, 918-928.

J.P. Bruzik (1996). Splicing glue: A role for SR proteins in *trans* splicing? *Microbial Pathogenesis* **21**, 149-155.

J.P. Bruzik and T. Maniatis (1995). Enhancer-dependent interaction between 5' and 3' splice sites in *trans*. *Proc. Natl. Acad. Sci. USA* **92**, 7056-7059.

J.P. Bruzik and T. Maniatis (1992). Spliced leader RNAs from lower eukaryotes are *trans*-spliced in mammalian cells. *Nature* **360**, 692-695.

J.P. Bruzik and J.A. Steitz (1990). Spliced leader RNA sequences can substitute for the essential 5' end of U1 RNA during splicing in a mammalian *in vitro* system. *Cell* **62**, 889-899.

J.A. Steitz, J.P. Bruzik, K. Tyc, S. Kass, and B. Sollner-Webb (1990). Molecular analyses of the functions of the SL and U3 snRNPs. *Molecular Biology Reports* **14**, 123.

P.A. Martello, J.P. Bruzik, P.L. deHaseth, R.S. Youngquist, and P.B. Dervan (1989). Specific activation of open complex formation at an *Escherichia coli* promoter by oligo (N-methylpyrrolicarboxamide)s: Effects of peptide length and identification of DNA target sites. *Biochemistry* **28**, 4455-4461.

K.A. Parker, J.P. Bruzik, and J.A. Steitz (1988). An *in vitro* interaction between the human U3 snRNP and 28S rRNA sequences near the α -sarcin site. *Nucleic Acids Research* **16**, 10493-10509.

J.P. Bruzik, K. Van Doren, D. Hirsh, and J.A. Steitz (1988). *Trans*-splicing involves a novel form of small nuclear ribonucleoprotein particles. *Nature* **335**, 559-562.

J.P. Bruzik, D.T. Auble, and P.L. deHaseth (1987). Specific activation of transcription initiation by the sequence-specific DNA-binding agents Distamycin A and Netropsin. *Biochemistry* **26**, 950-956.

Invited Book Chapter:

S. Furuyama and J.P. Bruzik (2003). *Trans*-splicing, In D.N. Cooper (ed.) Encyclopedia of the Human Genome **5**, 623-628. Nature Publishing Group, London.