CRISTINA IFTODE

Work address

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Current position: Associate Professor, Rowan University, Dept. Biological Sciences

Research Interests

- Regulation of eukaryotic gene expression
- Eukaryotic DNA replication
- Biology of DNA tumor viruses
- Mechanism of protein- nucleic acid interaction

Education

- Ph.D in Cellular and Molecular Biology, New York University Medical Center, May 1999
- M.S. in Cell Biology, New York University Medical Center, May 1995
- B.S. in Cell Biology and Genetics, University of Bucharest, Romania, June 1984
- B.S. in Biochemistry, University of Bucharest, Romania, June 1983

Employment

Title	Period	Institution
Associate Professor	2006- present	- Rowan University, Department of
		Biological Sciences, Glassboro, NJ

Assistant Professor	2001-2006	- Rowan University, Department of
		Biological Sciences, Glassboro, NJ
Postdoctoral Fellow	1999-2001	- Princeton University, Department of
		Molecular Biology, Princeton, NJ
Graduate Assistant	1992-1999	- New York University Medical Center,
		Dept. of Biochemistry, New York, NY
Research Assistant	1991-1992	- Princeton University, Dept. Chemistry
		Princeton, NJ
Biochemist	1987-1991	- Institute for Cellular Biology and
		Pathology, Bucharest, Romania
Biochemist	1984-1987	- Research Institute for Food Industry,
		Bucharest, Romania

Invited Positions

Visiting Research Collaborator, Princeton University, Department of Molecular Biology. (2001present)

Teaching

- Undergraduate Courses: Genetics, Concepts in Human Genetics, Molecular Genetics, Biochemistry, Biology I, General Biology: Human Focus
- Senior Seminars: Gene Therapy, Hot Topics in Molecular Biology, Molecular Mechanisms of Genetic Diseases, Genomics and Proteomics, The Nobel Prize in Medicine and Physiology, The Science Behind the Headlines: Current Trends in Molecular Genetics, The Use of DNA to Uncover Ancestry
- Independent Research: Biology Lab/Field Research

Awards

Rowan University Wall of Fame Award for Excellence in Teaching, 2005

Research with undergraduate students

• **Research Advisor**:

- over 20 undergraduate students at Rowan University (biology and biochemistry majors)

• Student presentations:

- Poster at *The 28th Annual Meeting of the American Society for Virology*, Vancouver, Canada (July 2009)

- Talk at the 8th Balkan Meeting on Human Genetics, Cavtat, Croatia (May 2009)
- Poster at The XIII International Congress of Virology, San Francisco, CA (July 2005)
- Poster at *The 23rd Annual Meeting of the American Society for Virology*, Montreal, Canada (July 2004)
- Posters at *The 15^{th/}/17thAnnual Saint Joseph's Sigma Xi Students Research Symposium*, Philadelphia, PA (April 2004, 2006)
- Posters at the *Rowan University Science*, *Technology*, *Engineering and Math Symposium*, Glassboro, NJ (April 2002-2009)

• Student Fellowships/Grants:

- National Science Foundation- Research Experience for Undergraduate Summer Program Fellowship (Summer 2006, 2009)

- American Society for Microbiology Undergraduate Teaching Fellowship (2009-2010)

- Four Rowan University Honors Program research assistantships (Spring 2005, Spring 2006)

- Two Rowan University Honors Program travel grants (2005, 2009)

- Rowan SAIL award for conference travel (2009)

Professional Memberships

- Member of American Society for Virology (ASV)
- Member of American Society for Microbiology (ASM)
- Member of Romanian Society for Cell Biology (RSCB)

Peer-Reviewed Publications

Chapters in Books

- Iftode, C., and Flint, S-J. (2007). Analysis of the efficiency of adenovirus transcription. In Wold, W.S.M., and Tollefson, A.E. (ed) *Adenovirus Methods and Protocols, Second Edition (Methods in Molecular Medicine series)*. Humana Press Inc. Totowa, NJ, **131** (2), 1-14.
- Borowiec, J.A., Gillette, T.G., Smelkova, N.V., and Iftode, C. (1999). Analysis of DNA replication complexes by DNA probing. In S. Cotterill (ed.) *Eukaryotic DNA replication*. (*The Practical Approach Series*, ed: B.D., Hames). Oxford Univ. Press. New York, NY, 245-273.

Journal Articles

- Iftode, C., and Flint, S-J. (2004). Viral DNA synthesis-dependent titration of a cellular repressor activates transcription of the human adenovirus type 2 IVa₂ gene. *Proc. Natl. Acad. Sci. USA.* **101**(51), 17831-17836.
- Iftode, C., and Borowiec, J.A. (2000). 5'-3' molecular polarity of human replication protein A (hRPA) binding to pseudo-origin DNA substrates. *Biochemistry*. **39** (39), 11970-11981.
- Iftode, C., Daniely, Y., and Borowiec, J.A. (1999). Replication protein A (RPA): the eukaryotic SSB. *Crit. Rev. Biochem. Mol. Biol.* **34**(3), 141-180.
- Iftode, C. and Borowiec, J.A. (1998). Unwinding of origin-specific structures by human replication protein A occurs in a two-step process. *Nucl. Acids Res.* **26**(24), 5636-5643.
- Iftode, C. and Borowiec, J.A. (1997). Denaturation of the SV40 origin of replication mediated by human replication protein A. *Mol. Cell. Biol.* **17**(7), 3876-3883.

Conference Proceedings

- Fitzgerald, M., Lewandowski, R., Oni, E., Smith, T., and Iftode, C. (2009). Mutations in a non-conserved region of DNA polymerase have distinct effects on adenovirus late protein production. *The 28th Annual Meeting of the American Society for Virology*. Vancouver, Canada, July 11-15.
- Bodak, P, Steinfeld, J, and Iftode, C. (2009). Who's your daddy's daddy's daddy? A survey of deep ancestry data. *The 8th Balkan Meeting on Human Genetics*. Cavtat, Croatia, May 13-18.
- Iftode, C., Heres, C., Joshi, V., Rajczy, R., Castano, K., and Flint, S-J. (2005). Identification of non-conserved residues of adenovirus DNA polymerase contributing to entry into the late phase of the adenoviral infectious cycle. *The XIII International Congress of Virology*, San Francisco, CA, July 23-28, p. 3.
- Hawk, A., Whidby, J., Harrison, J., Branagan, N., Shahrokh, S., Joshi, V., Iftode, C. and Flint, S-J. (2004). Construction of mutant recombinant adenoviruses to study the repressing mechanism of IVa₂ transcription. *The 23rd Annual Meeting of the American Society for Virology*. Montreal, Canada, July 11-15, p.246.
- Iftode, C., and Flint, S-J. (2003). Evidence that increased IVa₂ promoter concentration overcomes repression of adenoviral IVa₂ transcription by a cellular protein. *DNA tumor viruses and cell cycle regulation*. Trieste, Italy, July 15-20, p.78.
- Iftode, C., and Flint, S-J. (2001). Mutant adenoviruses that impair binding of a cellular repressor to the IVa₂ promoter stimulate IVa₂ and major late transcription in infected cells. *DNA tumor viruses and cell cycle regulation in cancer*. Cambridge. UK, July 24-27, p.119.
- Iftode, C., and Borowiec, J.A. (1999). 5' to 3' molecular polarity of human replication protein A (hRPA) to pseudo-origin DNA substrates. *Eukaryotic DNA Replication*. Cold Spring Harbor. New York, September 15-19, p.82.

Invited Talks

- Non-conserved residues of the adenovirus DNA polymerase required for entry into the late phase of the adenoviral infectious cycle. *On Route from Cell Biology to Molecular Medicine*, Bucharest, Romania, (September 2009).
- Novel insights into the mechanism of adenoviral late IVa₂ gene expression. CNRS-Center for Molecular Genetics, Université Paris VI, Gif-sur-Yvette, France, (June 2005).
- Novel insights into the mechanism of adenoviral late IVa₂ gene expression. Center for Biochemistry and Molecular Genetics, Université Paris VII, Gif-sur-Yvette, France, (June 2005).
- Novel insights into the mechanism of adenoviral late IVa₂ gene expression. Coriell Institute for Medical Research, Camden, NJ, *Seminar Series*, (June 2005).
- Control of the early to late transition in the adenoviral infectious cycle by a cellular repressor of transcription. *The 25th Workshop in Cell and Molecular Biology*, Bucharest, Romania, (September 2004).

Grants

- Rowan University Non-Salary Financial Support Grant. \$4,450. PI (2008-2009)
- Rowan University Non-Salary Financial Support Grant. \$6,000. PI (2006-2007)
- NIH Travel Grant. \$1,000. PI. (July 2005)
- Rowan University Non-Salary Financial Support Grant. \$4,200. PI. (2005-2006)
- Rowan University Separately Budgeted Research Grant. \$7,200. PI. (2004-2005)
- Rowan University Separately Budgeted Research Grant. \$4,200. PI. (2003-2004)
- Rowan University Separately Budgeted Research Grant. \$3,400. PI. (2002-2003)