Jeff Young

2000-	Fellow, Canadian Institute for Advanced Research (Nanoelectronics)
1996-	Professor, Dept. of Physics and Astronomy, UBC
1992-1996	Associate Professor, Dept. of Physics, UBC
1983-1992	Research Officer, National Research Council, Ottawa, Ontario

Recent Selected Publications:

1. Cowan, A.R. and Young, J.F., "Optical bistability involving photonic crystal microcavities and Fano lineshapes", Phys. Rev. E, **68**, 46606-1-16, 2003.
2. Mondia, J.P., van Driel, H.M., Jiang, W., Cowan, A.R., and Young, J.F., "Enhanced Second Harmonic Generation from Planar Photonic Crystals", Optics Letters, **28**, 2003.
3. Qi, D., Kwong, K., Rademacher, K., Wolf, M., and Young, J.F., "Optical Emission of Conjugated Polymers Adsorbed to Nanoporous Alumina, 3, 1265-1268, 2003.
4. Rieger, G.W., Virk, K.S., and Young, J.F., "Nonlinear Propagation of Ultrafast 1.5 micron Pulses in High-Index-Contrast Silicon-on-Insulator Waveguides", Appl. Phys. Lett. 84, 900-902, 2004.
5. Cowan, A.R., Rieger, G.W., and Young, J.F., "Nonlinear transmission of 1.5 m pulses through single-mode silicon-on-insulator waveguide structures", special issue of Optics Express **12**, 1611-1621 2004.
6. Hughes, S., Ramunno, L., Young, J.F., and Sipe, J.E., "Extrinsic Optical Scattering Loss in Photonic Crystal Waveguides: Role of Fabrication Disorder and Photon Group Velocity", Phys. Rev. Lett. **94**, 033903, 2005.
7. Cowan, A.R., and Young, J.F., Semicond. Sci. Technol. 20 R41-R56 (invited review) 2005.
8. Dalacu, D., Frederick, S., Bogdanov, A., Poole, P.J., Aers, G.C., Williams, R.L., McCutcheon, M.W., and Young, J.F., "Fabrication and optical characterization of hexagonal photonic crystal microcavities in InP-based membranes containing InAs/InP quantum dots", J. Appl. Phys. 98, 023101 2005.
9. Mondia, J.P., Tan, H.W., Linden, S., van Driel, H.M., and Young, J.F., "Ultrafast tuning of 2D planar photonic crystal waveguides via free carrier injection and the optical Kerr effect", J. Opt. Soc. Am. B (in Press) 2005.

+ over a dozen invited talks at symposia/workshops/conferences in past 3 years

Funding:

NSERC: CRD	Nonlinear Optical Properties of Planar Photonic Crystals	C	148,000 pa	2002-2004	J.F. Young	
NSERC: MFA	Pacific Centre for Advanced Materials and Microstructures	C	236,000 pa	2003-2007	K.A.R. Mitchell	+ 6 others
NSERC: Strat.	New Approach to Optical Information Processing	C	163,890 pa	2004-2006	J.F. Young	F. van Veggel
NSERC: Research Grant	Influence of Nanostructure on the Optical Properties of Materials	C	69,000 pa	2002-2006	J.F. Young	