

Cell Cycle Checkpoints

(Weinert and Hartwell 1989; Weinert and Hartwell 1993; Navas, Zhou et al. 1995; Navas, Sanchez et al. 1996; Harrison and Haber 2006; Branzei and Foiani 2009; Kume, Koyano et al. 2011) (Schoemaker, Gayda et al. 1984; Freudl, Braun et al. 1987; Weinert and Hartwell 1989; Weinert 1992; Bi and Lutkenhaus 1993; Weinert and Hartwell 1993; D'Urso, Grallert et al. 1995; Navas, Zhou et al. 1995; Paulovich and Hartwell 1995; Navas, Sanchez et al. 1996; Higashitani, Ishii et al. 1997; Marini, Pellicioli et al. 1997; Mukherjee, Cao et al. 1998; Trusca, Scott et al. 1998; Hoyt 2001; Zhou, Yao et al. 2002; Lew and Burke 2003; Bharadwaj and Yu 2004; Parrilla-Castellar, Arlander et al. 2004; Taylor, Scott et al. 2004; Helt, Wang et al. 2005; Lisby and Rothstein 2005; Hansen and Schedl 2006; Wang and Sun 2006; Callegari and Kelly 2007; Musacchio and Salmon 2007; Sclafani and Holzen 2007; Barlow, Lisby et al. 2008; Burke and Stukenberg 2008; Clarke and Bachant 2008; Fukagawa 2008; Varetto and Musacchio 2008; Vogt, Kirsch-Volders et al. 2008; Xu, Vaithiyalingam et al. 2008; Doncic, Ben-Jacob et al. 2009; Fuller and Stukenberg 2009; Homer, Gui et al. 2009; Kang and Yu 2009; Kops 2009; McAdams and Shapiro 2009; Nezi and Musacchio 2009; Segurado and Tercero 2009; Vanoosthuysse and Hardwick 2009; Voineagu, Freudenreich et al. 2009)

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Cellular Regulation of Natural Genetic Engineering

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DNA Damage Repair and Mutagenesis

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From the Cell Surface to the Genome

(Dorer, Pryciak et al. 1995; Overton and Blumer 2000; van Drogen and Peter 2001; Dohlman and Slessareva 2006; Matlin 2011)

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The Genome as a Read-Write (RW) Storage System

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How *E. Coli* Chooses the Best Sugar to Eat

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Proofreading DNA Replication

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What Makes a Man Different from a Mouse

(Alonso and Wilkins 2005; Gompel, Prud'homme et al. 2005; Sanges, Kalmar et al. 2006; Smith, Sanchez et al. 2008; Ho, Johnsen et al. 2009; Visel, Rubin et al. 2009)

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