



Children's UW Medicine
Hospital & Regional Medical Center

**AUTISM SPECTRUM DISORDER
 AUTISM TREATMENT NETWORK**

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UW CHDD CLINIC at UW

- Title V funded
- See at least 80 new cases of autism a year
- Multidisciplinary approach
- Well funded research (Dr. Geri Dawson)
- Part of the Autism treatment Network (ATN)
 - Five centers: Columbia, Baylor, Oregon Health sciences, UW and Harvard (applied for NIH grant and also privately funded)

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MULTIDISCIPLINARY

- Psychologists/post doc fellows (behavioral)
- Physicians
 - Psychiatrists
 - Neurodevelopmental
 - Gastroenterologists
 - Sleep medicine
- Nutritionists
- Social workers (school)

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PREVALENCE OF SLEEP DISTURBANCE IN AUTISM

- It has been estimated that between 44% and 83% of children with autism have sleep problems (Patzold et al 1998 Wiggs &Stores 1996)
- Significant sleep onset and maintenance insomnia (Malow 2005)
- Irregular sleep wake pattern, early waking (Honomichl et al 2002)

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BEHAVIORAL TREATMENT

- Extinction
- Graduated extinction
- Faded bedtime
- Relaxation techniques
- Massage therapy
- Chronotherapy

Melatonin and Autism

- Several studies have shown lower nocturnal melatonin in subjects with autism compared to controls
 - Nocturnal serum melatonin 25% decreased in autistic subjects (Nir, 1995)
 - Nocturnal 6 SM excretion was much lower in in prepubertal group

Nir et al J. Autism Dev Disorder 25, 1995
Tordjman et al. Biol Psychiatry 57, 2005

Areas for future Research

- Larger prevalence studies (multi center)
- Controlled studies to evaluate efficacy of behavioral interventions
- Study of circadian rhythm disturbances and phase markers (level melatonin)
- Response to treatment with melatonin
- Prevalence of sleep disturbance (OSA/PLMD)
- Prevalence of GI disturbance (GER or inflammatory)