

# Weap: The People

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Wisconsin Early Autism Project, Inc.

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## Kaspar the Friendly Robot

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The University of Hertfordshire in Hatfield just north of London, England has a new resident. Meet Kaspar, an interactive robot designed to help children with autism.

Kinesics and Synchronisation in Personal Assistant Robotics, or "Kaspar", is unlike other robots because he has been designed to imitate human emotion in his "face".

Housed in the University, the School of Computer Science has started a "Roboskin" development project.

This project will create a unique "skin" for Kaspar that will be embedded with sensors. This will allow Kaspar to respond to touch. The technology is still being

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## What You Need to Know about Medications

National Institute of Mental Health

<http://www.nimh.nih.gov/health/publications/autism/complete-publication.shtml#pub4>

Medications are often used to treat behavioral problems, such as aggression, self-injurious behavior, and severe tantrums that keep people with ASD from functioning more effectively at home or school. The medications used are those that have been developed to treat similar symptoms in other disorders. Many of these medications are prescribed "off-label". This means they have not been officially approved by the FDA for use in children, but the doctor prescribes the medications if he or she feels they are appropriate for a particular child. Further research needs to be done to ensure not only the efficacy but the safety of psychotropic agents used in the treatment of children and adolescents.

On October 6, 2006 the U.S. Food and Drug Administration (FDA) approved risperidone (generic name) or Risperdal (brand name) for the symptomatic treatment of irritability in autistic children and adolescents ages 5 to 16. The approval is the first for the use of a drug to treat behaviors associated with autism in children. These behaviors are included under the general heading of irritability, and include aggression, deliberate self-injury and temper tantrums.

Olanzapine (Zyprexa) and other "antipsychotic" medications are used "off-label" for the treatment of aggression and other serious behavioral disturbances in children, including children with autism. Other medications are used to address symptoms or other disorders in children with autism. Fluoxetine (Prozac) and sertraline (Zoloft) are approved by the FDA for children age 7 and older with obsessive-compulsive disorder. Fluoxetine is also approved for children age 8 and older for the treatment of depression. Fluoxetine and sertraline are antidepressants known as selective serotonin reuptake inhibitors (SSRIs).

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developed by the group's Italian partners and should be finished in 3 years time.

KASPAR is being used to study human-robot interaction as part of the European [RobotCub Project](#), which aims to build an open-source robot platform for cognitive development research. The Adaptive Systems Research Group is investigating the use of gestures, expressions, synchronisation and imitation. In addition, the robot may be used for developmental studies and interaction games.

This family of robots has been used in the past in the [Aurora project](#) which investigated the possible use of robotic systems as therapeutic or educational tools to encourage social interaction skills in children with Autism. They are also currently being used in investigations with children with autism, part of the European [IROMEC project](#), which acknowledges the important role of play in child development as a crucial vehicle for learning about the physical and social environment, the self, and for developing social relationships. IROMEC targets children who are prevented from playing, due to cognitive, developmental or physical impairments which affect their play skills, and is investigating how robotic toys can empower children with disabilities to discover the range of play styles from solitary to social and cooperative play.

KASPAR has 8 degrees of movement in the head and neck and 6 in the arms and hands. The face is a silicon-rubber mask, which is supported on an aluminium frame. Kaspar has eyes fitted with video cameras and a mouth capable of opening and smiling.

“Children with autism have problems with touch, often with either touching or being touched,” said Professor Kerstin Dautenhahn who is heading up the team. “Touch is a very important part of social development and communication. The tactile sensors [in the new skin] will allow the robot to detect different types of touch and it can then encourage or discourage different approaches.”♦



Go here to see a short video displaying Kaspar's range of movement:

<http://kaspar.feis.herts.ac.uk/video/Kaspar.mpg>

### **A Message to Line Therapists**

**Summer has begun and we know that a number of line therapists are more available during the summer. We realize that a number of the employees who add additional hours and new children to their schedules may need to cut back again in Fall. If you will not be able to maintain your summer caseload into Fall, please notify your seniors now. This will allow the HR staff to better prepare to replace you on teams when the new school year begins. We are trying to prevent children from missing therapy hours due to staff turnover. Most seniors begin looking at Fall schedules in July so make sure you notify them as soon as you know that you will not be able to stay on a team in the Fall.**

**As always, thank you for your hard work and continued dedication to the children.**

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Despite the relative safety and popularity of SSRIs and other antidepressants, some studies have suggested that they may have unintentional effects on some people, especially adolescents and young adults. In 2004, after a thorough review of data, the Food and Drug Administration (FDA) adopted a "black box" warning label on all antidepressant medications to alert the public about the potential increased risk of suicidal thinking or attempts in children and adolescents taking antidepressants. In 2007, the agency extended the warning to include young adults up to age 25. A "black box" warning is the most serious type of warning on prescription drug labeling. The warning emphasizes that patients of all ages should be closely monitored, especially during the initial weeks of treatment, for any worsening depression, suicidal thinking or behavior, or any unusual changes in behavior such as sleeplessness, agitation, or withdrawal from normal social situations.

A child with ASD may not respond in the same way to medications as typically developing children. It is important that parents work with a doctor who has experience with children with autism and children should be monitored closely while taking a medication. Doctors generally prescribe the lowest dose possible to be effective. It is important to ask the doctor about any side effects the medication may have and to keep a record of how the child responds to the medication. It is also helpful to read the "patient insert" that comes with the medication. Some people keep the patient inserts in a small notebook to be used as a reference. This is most useful when several medications are prescribed.

**Anxiety and depression.** The selective serotonin reuptake inhibitors (SSRI's) are the medications most often prescribed for symptoms of anxiety, depression, and/or obsessive-compulsive disorder (OCD). Only one of the SSRI's, fluoxetine, (Prozac®) has been approved by the FDA for both OCD and depression in children age 7 and older. Three that have been approved for OCD are fluvoxamine (Luvox®), age 8 and older; sertraline (Zoloft®), age 6 and older; and clomipramine (Anafranil®), age 10 and older.<sup>4</sup> Treatment with these medications can be associated with decreased frequency of repetitive, ritualistic behavior and improvements in eye contact and social contacts. The FDA is studying and analyzing data to better understand how to use the SSRI's safely, effectively, and at the lowest dose possible.

**Behavioral problems.** Antipsychotic medications have been used to treat severe behavioral problems. These medications work by reducing the activity in the brain of the neurotransmitter dopamine. Among the older, typical antipsychotics, such as haloperidol (Haldol®), thioridazine, fluphenazine, and chlorpromazine (Thorazine), haloperidol was found in more than one

study to be more effective than a placebo in treating serious behavioral problems.<sup>27</sup> However, haloperidol, while helpful for reducing symptoms of aggression, can also have adverse side effects, such as sedation, muscle stiffness, and abnormal movements, which can be irreversible.

Placebo-controlled studies of the newer "atypical" antipsychotics are being conducted on children with autism. The first such study, conducted by the NIMH-supported Research Units on Pediatric Psychopharmacology (RUPP) Autism Network, was on risperidone (Risperdal®).<sup>28</sup> Results of the 8-week study were reported in 2002 and showed that risperidone was effective and well tolerated for the treatment of severe behavioral problems in children with autism. The most common side effects were increased appetite, weight gain and sedation. Further long-term studies are needed to determine any long-term side effects. Other atypical antipsychotics that have been studied recently with encouraging results are olanzapine (Zyprexa®) and ziprasidone (Geodon®). Ziprasidone has not been associated with significant weight gain.

**Seizures.** Seizures are found in one in four persons with ASD, most often in those who have low IQ or are mute. They are usually treated with one or more of the anticonvulsants. These include such medications as carbamazepine (Tegretol®), lamotrigine (Lamictal®), topiramate (Topamax®), and valproic acid (Depakote®). The level of the medication in the blood should be monitored carefully and adjusted so that the least amount possible is used to be effective. Although medication usually reduces the number of seizures, it cannot always eliminate them.

**Inattention and hyperactivity.** Stimulant medications such as methylphenidate (Ritalin®), used safely and effectively in persons with attention deficit hyperactivity disorder, have also been prescribed for children with autism. These medications may decrease impulsivity and hyperactivity in some children, especially higher functioning children.

Several other medications have been used to treat ASD symptoms. Among them are other antidepressants, naltrexone, lithium, and some of the benzodiazepines such as diazepam (Valium®) and lorazepam (Ativan®). The safety and efficacy of these medications in children with autism has not been established. Since people may respond differently to different medications, each child's unique history and behavior will help the doctor decide which medication might be most beneficial.♦

*For more information, contact the Madison clinic to receive a more detailed description prepared by our Psychiatrist.*

## Upcoming Events

### Movie Night (Viewing & Discussion)

Dr. Glenis Benson will be sharing a number of documentaries regarding autism...

**7:00 - 9:00 pm**

**Tues, June 16<sup>th</sup>, 2009**

For information call (608) 213-8519

or email [autismmadison@gmail.com](mailto:autismmadison@gmail.com)

### Treasure Hunt Fundraiser

Collect puzzle pieces from local businesses and well known areas throughout Fort Atkinson. Figure out all of the clues, collect all of your pieces and return to Jones Park where we will put all your puzzle pieces together to create a giant custom made puzzle.

**June 20<sup>th</sup>**

**Ft. Atkinson**

**Presale Raffle Tickets are available: \$1 each or \$5 for 6.**

9:00am – Raffle Ticket & Bake Sale Start (During and After the event)

9:30am - Check-In

10:00am - Shot Gun Start

2:00pm – Raffle Drawing (You do NOT need to be present)

[Download Flier](#)

Email: [pamalatrader@yahoo.com](mailto:pamalatrader@yahoo.com)

**SEE COMPLETE LISTINGS ON OUR WEBSITE [WWW.WIAUTISM.COM](http://WWW.WIAUTISM.COM)**

## Groups and Classes

Location	Group	Age/Level	Facilitator	Fee	Days	Time	Start Date
Madison	Parent Group	Open to Community	Chris W	\$30/session \$4/child daycare (rgstr 2 wks in advc.)	2 <sup>nd</sup> Tues ea.Month	4:00PM- 5:30PM	Ongoing
Madison	Parents/ Caregivers	Open to Community	varies	\$30/session \$4/child daycare (rgstr 2 wks in advc.)	2 <sup>nd</sup> Tues ea.Month	5:30PM- 7:00PM	Ongoing
Madison	Social Skills: Beginner	Ages 2 ½-4	Margot S	\$30/session	Thursdays	12:30PM- 2:00PM	June 18 <sup>th</sup> - August 13 <sup>th</sup>
Madison	Social Skills: Intermediate	Ages 4-6	Katie K	\$30/session	Thursdays	3:00PM- 4:30PM	June 18 <sup>th</sup> - August 13 <sup>th</sup>
Madison	Social Skills: Advanced	Ages 7-9	Megan S	\$30/session	Wednesdays	4:30PM- 6:00PM	June 17 <sup>th</sup> - August 12 <sup>th</sup>
Madison	Speech Group: Language Adventurers	Ages 2 ½-4	Angie L	\$50/session	Wednesdays	12:30PM- 2:00PM	June 17 <sup>th</sup> - August 12 <sup>th</sup>
Madison	Speech Group: Language Pioneers	Ages 5-7	Dana B	\$50/session	Tuesdays	3:00PM- 4:30PM	June 16 <sup>th</sup> - August 11 <sup>th</sup>
Milwaukee	Play group	Ages 3-5	Stephanie B	\$30/week	Wednesdays	9:00AM- 10:00 AM	June 10 <sup>th</sup> - August 12 <sup>th</sup> no group July 22 <sup>nd</sup>
Milwaukee	Teamwork Club	Ages 5-8	Stephanie B	\$30/week \$120 total	Tuesdays	3:00PM- 4:30PM	July 28 <sup>th</sup> - August 18 <sup>th</sup>
Milwaukee	Girls' Club	Ages 6-9	Stephanie B	\$30/week \$150 total	Tuesdays	3:00PM- 4:30PM	June 16 <sup>th</sup> - July 14 <sup>th</sup>
Milwaukee	Kids' Group	Ages 8-12	Stephanie B	\$30/week	Mondays	4:30PM- 6:00PM	June 15 <sup>th</sup> - August 10 <sup>th</sup> no group July 20 <sup>th</sup>
Milwaukee	Friendship Club	Ages 11-14	Stephanie B	\$30/week	Thursdays	3:00PM- 4:30PM	June 18 <sup>th</sup> - August 13 <sup>th</sup> no group July 23 <sup>rd</sup>
Milwaukee	Play group	Ages 3-5	Stephanie B	\$30/week	Wednesdays	9:00AM- 10:00 AM	June 10 <sup>th</sup> - August 12 <sup>th</sup> no group July 22 <sup>nd</sup>
Eau Claire	Social Skills	Ages 3-5	Kalley/Brittany	\$30/session	Mondays	3:30PM- 5:30PM	June 15 <sup>th</sup> - July 27 <sup>th</sup>
Eau Claire	Social Skills	Ages 6-8	Shelley/Sara	\$30/session	Wednesdays	3:30PM- 5:30PM	June 17 <sup>th</sup> - July 29 <sup>th</sup>

## Current Openings

<b>MADISON</b> <b>608-288-9040</b> Janesville Madison Mazomanie Rio	<b>MILWAUKEE</b> <b>262-432-5660</b> Bayview Elkhorn Germantown Greenfield Kenosha	Milwaukee Mukwonago Oconomowoc Port Washington Racine West Allis	<b>LA CROSSE</b> <b>608-781-6500</b> Genoa <b>GREEN BAY</b> <b>920-338-1610</b> Sturgeon Bay Wautoma	<b>EAU CLAIRE</b> <b>715-832-2233</b> Adams Amery Buffalo City Colfax Eau Claire	Hazelhurst Luck Marshfield Medford Merrill	New Richmond Prescott Hager Stevens Point Tomah Westfield
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