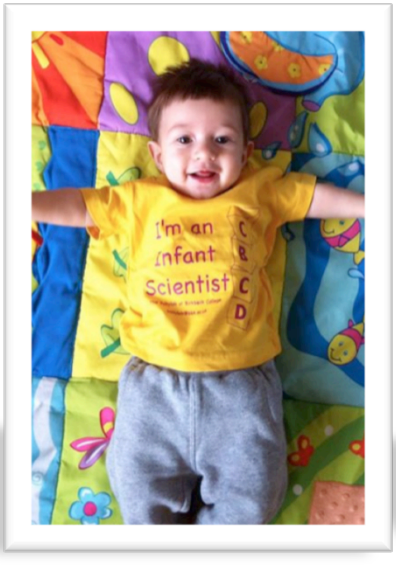
# Babylab

# 2013-14 NEWSLETTER

## Centre for Brain & Cognitive Development

**Thank You** to our funders, including:

Autistica | Autour de Williams | Bill & Melinda Gates Foundation | British Academy | Charles Wolfson Charitable Trust | Daiwa Foundation | Economic and Social Research Council | European Commission | The Great Britain Sasakawa Foundation | Health Enterprises East Limited | Innovative Medicines Initiative | Leverhulme Trust | L'Oreal | Maurice Wohl Charitable Foundation | Medical Research Council | Nuffield Foundation | The Rayne Foundation | Royal Society | Simons Foundation | Waterloo Foundation | Wellcome Trust | The Wolfson Foundation |




@BirkbeckBabylab

Birkbeck
UNIVERSITY OF LONDON

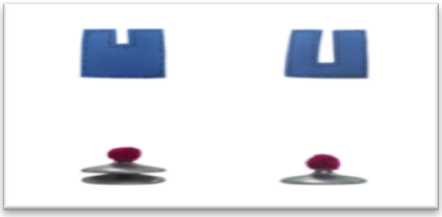
# Our research findings……

## Ready to Learn 2

Katarina Begus, Teodora Gliga and Victoria Southgate

As adults, we know that we learn best when we are interested in what we are learning. In addition, when we are interested, we prepare ourselves so that we can process and remember as much information as possible. This *preparedness for learning* is reflected in particular brain states, the intensity of which we can measure and use to predict how well information will be learned.

Following our first study, Ready to Learn, which showed that we can measure the same brain activation in babies when they expect to hear new information, we have further investigated how this activation affects babies' learning. We gave infants different objects, varying in complexity, and measured their brain activation (using an EEG sensor net) while they explored them. We expected that different objects would elicit different degrees of interest which, in turn, should elicit different degrees of this brain activation and, therefore, different levels of learning about the objects' features. We tested how well the babies learnt the objects' features by showing them pictures of each object that they have explored, paired with very similar, yet slightly different objects, to see whether they noticed the differences.



Object pairs used in the study

We found that those objects that had elicited most brain *preparedness to learn* were indeed remembered better at test, which means we can use this measure to study what infants find interesting, and how to nurture these interests and encourage babies' own active engagement in learning.

## What is a Good Night's Sleep?

Manuela Pisch and Annette Karmiloff-Smith

Although quite a lot is known about the advantageous effects of sleep in adults and older children, the role of sleep in infancy is still very poorly understood. We have been investigating which sleep patterns relate to the social and cognitive development of babies – for example, does night sleep have different effects to day sleep, and does it matter if a baby is waking up often?

We tested certain aspects of babies' cognitive development (memory and attention), social development in an interaction with their parents, as well as their sleep patterns at 4, 6, 8 and 10 months. We are still analysing the data, but have so far found that sleep patterns change most between 4 and 6 months, and that more sleep is related to better memory abilities.

# Baby Steps Prediction Studies

Carina De Klerk, Victoria Southgate and Mark Johnson

Being able to predict what someone will do next is an important skill for cooperating with and understanding others. Some researchers have suggested that infants can only accurately predict another person's on-going action if they have experience with performing this action themselves. However, as infants spend a considerable amount of time simply watching others' actions we wondered whether visual experience alone might help infants to predict others' actions. To test this idea we investigated infants' ability to predict actions that they cannot yet perform themselves, and of which they have different amounts of visual experience.

**Looking time:** In this study pre-walking infants watched videos of stepping actions that were either in the normal upright orientation, or that were turned upside down (as in the pictures above). These stepping actions were briefly obscured from the babies' view, after which they re-appeared, either continued correctly (in a time-coherent way) or incorrectly (in a time-incoherent way). Infants' looking times suggested that they were only able to distinguish between the correct and incorrect action continuations when they were watching the stepping actions in the normal, visually familiar, orientation. As the infants in this study were not walking yet, this demonstrates that motor experience is not always necessary for accurate action prediction and suggests that, sometimes, visual experience alone might be sufficient.

**EEG:** We know from previous studies that the motor areas of the brain are involved in predicting others' actions. Using the EEG technique, we therefore measured the activation in these areas while pre-walking infants watched the upright and inverted stepping actions. We found that infants showed more motor cortex activation while watching upright stepping actions (actions we know they *can* predict) compared with when they watched inverted stepping actions (which we know they *cannot* predict). This suggests that infants were activating the motor areas of the brains when they were predicting how the stepping actions should continue, even though they did not yet have any experience performing this action themselves.

# The Gambia Project

Clare Elwell, Sarah Lloyd-Fox, Katarina Begus, Drew Halliday and Helen Maris

A team of Babylab and University College London (UCL) researchers recently visited Gambia, a small country in West Africa, as part of a project looking to use the NIRS technique (which enables us to look at the functioning of developing infant brains) in studies of nutrition and development. Approximately 165 million children worldwide are under nourished, a particular problem facing parts of rural Africa. Malnourishment can affect the development of the brain in childhood and has far reaching effects into adulthood.

In the first study of its kind to use a neuroimaging technique with infants in a rural African setting, we have successfully collected data from 100 babies, ranging from newborn to 2 years of age. We hope to use this measure in the future to inform studies investigating different food supplements and help assess their efficiency in protecting the brain from abnormal development.

*Gambian infants participating in our studies.*

*Photos from our previous donations to the rehabilitation clinic, the local primary school and the women's garden project.*

## Call for donations of baby clothes!

As part of the work done on nutrition intervention, the village, where we conducted our project, has a rehabilitation clinic, which sees a number of malnourished infants and toddlers. Despite the climate in Sub-Saharan Africa, warm clothing for the clinic is very useful for when the babies are unwell. Before our third visit, we collected some baby clothes and children's books from staff members as well as our Babylab parent volunteers and were delighted to pass the generous donations on to the children of Gambia. We would very much like to continue with this work and collect donations on a regular basis to help the children in the clinic and are, therefore, asking for your help:

If you have any **used infant clothing (age 0-3 years)** that you would be happy to donate, please bring them with you on your next visit to the Babylab! We are excited to facilitate a direct transfer from your hands to the hands of people who would very much appreciate these items. Our sincerest thanks, in advance, for anything you might be able to donate!

MRC International Nutrition Group

BILL & MELINDA GATES foundation

# The Sighted Babies of Blind Parents Study

Atsushi Senju, Natasa Ganea, Angelina Vernetti, Leslie Tucker, Kim Davies, Greg Pasco, Kristelle Hudry, Mayada Elsabbagh, Tony Charman and Mark Johnson

Infants have an amazing capacity to learn from adults. Such capacity for social communication develops rapidly in the first few years of life. The main purpose of this study is to explore how sighted babies of blind parents develop the brain mechanisms and skills for social communication, and in particular how their brains learn to process faces and gaze, and how they develop skills for face-to-face communication.

In this study, babies visit the Babylab with their blind parents two or three times, at around five, nine and fourteen months of age. We also follow them up at two to four years of age, when we either visit their home or invite them back to the Babylab. During each visit, babies watch several images and movies of faces during which we record their eye movement and brain activity. Babies also play games assessing visual, motor, language and social skills development.

So far 15 babies and their blind parents have visited the Babylab, and five of them have completed all the visits. From these initial five babies, we have found that the way these babies react to sighted adults is the same as the babies of sighted parents. However, sighted babies of blind parents are able to flexibly change how they communicate when they play with their blind parents - they used less eye gaze and more vocal communication. We also found that these babies develop more advanced skills in visual attention and memory. For example, they were better at remembering the location of a hidden toy. These results show that infants' brains can flexibly learn how to communicate effectively with different adults.

We still need more babies to take part! For more details please visit our webpage (www.cbcd.bbk.ac.uk/babylab/SIBP).

# 4-6-9 Follow-Up Study of Executive Functions

Karla Holmboe

Executive functions involve abilities such as keeping things in your memory, paying attention, multi-tasking and inhibiting unwanted actions. In 2005-2007, Karla Holmboe (then a PhD student) carried out a study at the Babylab looking at executive functions in babies. She is now (as a Research Fellow at Essex University) running a follow-up study in order to understand more about whether executive functions in infancy can predict anything about children's executive functions, school performance and social skills later in childhood.

Testing takes place during home visits, and the study also involves questionnaires completed by parents and teachers. The original participant group consisted of more than 100 babies who were tested at 4, 6 and 9 months of age. There has been a fantastic return rate of 90% and so far 36 children have been followed up at 8 years of age. Karla would like to thank all the families who have already participated in the follow-up study (and she looks forward to seeing the rest in 2014) – without you this research simply would not be possible. The children have been brilliant and such fun to work with!

*Kai participating in the original study in 2006 and the follow-up study in 2014.*

# Baby Fixations: How do babies move their eyes?

Irati Rodriguez Saez de Urabain, Tim Smith and Mark Johnson

Infants' eyes are an open window to cognitive development and by studying their gaze, researchers can learn a great deal about developmental changes that occur during the first year of life.

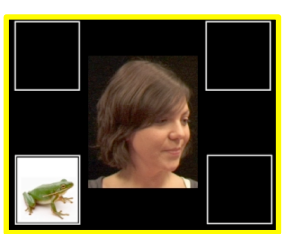
In this study we followed two groups of babies from 3 to 6 months and from 6 to 12 months old in order to investigate how the control of eye movements develops over the first year of life. In each visit we monitored their eye movements while they were viewing (1) a set of naturalistic videos in which three people perform various baby-friendly actions, (2) a set of abstract non-social videos created by pixelating some of the videos in (1), and (3) static pictures.

Results reveal that at 3 months old babies gaze is mainly driven by factors such as colour or contrast, whereas from 4 months of age they start to use more complex viewing strategies, and adapt their eye-movements to different viewing conditions. Also, preliminary simulations with computer models of eye movement control show how development can be explained in terms of more efficient visual and cognitive processing.

# iCue: Which face is giving an informative cue?

Kristen Swan-Tummeltshammer and Natasha Kirkham

We wondered whether infants can distinguish cues that give good information from cues that are misleading or inaccurate. For example, will babies follow a face that is looking the wrong way? We introduced 8-month-olds to two faces, one reliable face that always looked at the box where a picture would appear, and a second unreliable face that looked only 25% of the time at the picture and the rest of the time at an empty box. After familiarising the babies with these faces and their reliability, we showed them blank trials, during which no pictures appeared, and we used an eye-tracker to record where the babies looked. Did they know which face was reliable?



The answer was Yes! The 8-month-olds looked in the same box where the reliable face had looked, telling us that they expected a picture to appear there. The babies did not look in the box where the unreliable face had looked, and instead looked randomly in all four boxes, telling us that they did not expect the unreliable face to give good information about the picture's whereabouts. This study shows that 8-month-olds are highly sensitive to the accuracy of different people and that they can use information about a person's reliability to modify their behaviour.

# ‘Ready…Go!’ The moving hands EMG study

Caspar Addyman, Sinead Rocha and Denis Mareschal

Our previous ‘Infant Time Machine’ study revealed that even infants as young as 4 months can learn the timing of a repeating visual event. In the current study we wanted to see if they can make use of their timing knowledge in the real world. Babies played a game where they held Sinead’s hands as she moved them up and down in a regular rhythm. First Sinead would say ‘Ready’, pause for a fixed amount of time, then say ‘Go!’ and lift the babies’ arms up and down. After seven practice trials to give infants a chance to learn the timing, Sinead would say ‘Ready’ then pause and do nothing.

We measured infants’ muscle activity to see if they would anticipate a movement to continue the game. There were fast and slow versions of the game that took 2 or 4 seconds. We found that from as young as four months old infants showed muscle activity two seconds after the ‘ready’ cue in the 2-second condition, and four seconds after in the 4-second condition. These findings suggest that from very early in life infants are able to use timing information to structure their physical interactions.

This was our first study using our new EMG equipment at the Babylab. EMG (or electromyography) allows us to measure muscle activation using special sensors designed for babies, and is sensitive enough to pick up even anticipation of movement, as well as more easily visible kicking, reaching and wriggling! It works in the same way as our white EEG nets, but instead of 128 sensors on the head, we have just two sensors that are held in place with stickers on the arm and hidden underneath the babies’ clothes.

Thanks to all the babies who came and played so nicely with us! Our next study will combine the results of these two studies with infants either reaching for or just watching a toy that appears at regular intervals. We want to see if babies have greater timing accuracy when they are more physically involved. We hope to see some of you for this in the next few months!

The Moving Hands study was featured in the Daily Planet Show, on the Discovery Channel Canada. Above is a screenshot of the show featuring the now internationally famous participants Greta (left) and Olive (right)!

## ToonTime EMG Study

Caspar Addyman, Sinead Rocha and Denis Mareschal

Some babies from the 'Moving Hands' study also took part in 'ToonTime' which compared babies' movement in a task where they can learn the timing of an event, versus a task with no consistent timing. In this study, babies watched a cartoon video clip that would pause every few seconds and show a blank screen. For half the infants, this pause was always 6 seconds long; the remaining infants saw the same video, but the length of the pause would always vary, so the video could resume at any time.

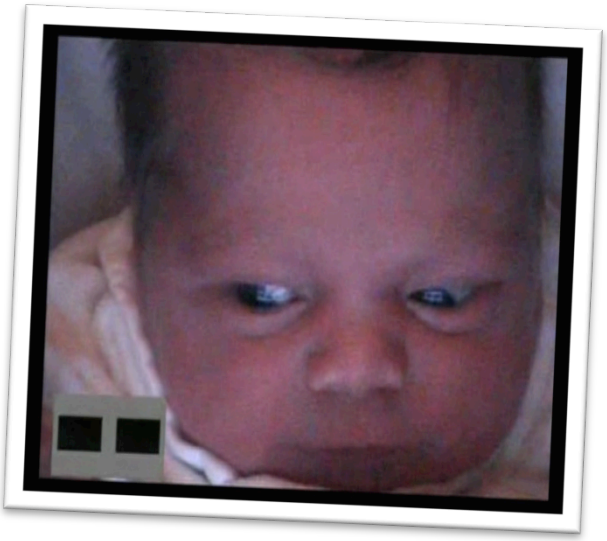
We hypothesize that infants may use movement to calibrate their estimations of time, and therefore that babies seeing the consistently timed pause will show corresponding movement. Again, we measured muscle activity using EMG. We are currently analysing the data and will update you on the results in the next newsletter!

# Baby Touch

Maria-Laura Filippetti, Sarah Lloyd-Fox and Mark Johnson

The ability to differentiate your own body from others is a fundamental skill, critical for humans' ability to interact with their environments and the people in them.

We know from adult studies that the integration of information from different senses is key to body awareness. We were interested in finding out how newborns learn to distinguish their bodies from others and whether the same mechanisms involved in body perception in adults are present at birth.



We measured the looking behaviour of 1- to 3-day-old newborns presented with a video of another baby's face being touched on the cheek with a soft paintbrush, while the newborn's corresponding cheek was either stroked at the same time or with a time delay.
The newborns showed greater interest in looking at the other baby's face only when the touch matched the touch that they were also experiencing. We have also found that the babies were less interested when the face was presented upside down, making it less relatable to themselves.

We were also interested in looking at how the infant brain responds to body awareness. Brain activity was measured while 5-month-old babies were watching videos of their own face touched by a paintbrush, either at the same time or with a temporal delay.

The analysis of brain activation revealed common brain mechanisms of body awareness between infants and adults. We are now looking at different factors that help babies to understand the difference between self and others.

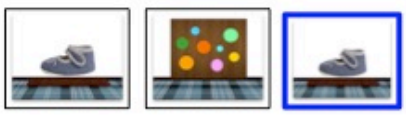
# Remember Study

Barbara Pomiechowska, Teodora Gliga and Natasha Kirkham

In a series of EEG studies we investigated babies' memory for different objects. Our 12-month-old participants saw cartoons in which objects came onto a stage, were obscured, and then reappeared. We were interested to see how the baby brain would respond if instead of showing the same toy after the occlusion (an expected outcome), we would present a different one (an unexpected outcome): *Would we see a surprise reaction in brain activity?*

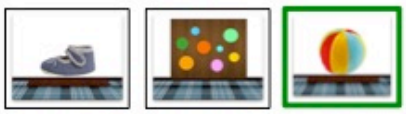
We observed that if babies are presented with familiar objects, the baby brain notices the object change only when we replace the original object with a new object from a different object family (e.g., we replace a shoe with a car), but not when the original object is replaced with a different object from the same object family (e.g., a blue shoe is replaced with a pink shoe). However, when babies watch unfamiliar objects, their brain reacts to even the smallest types of object change.

This suggests that the response of the brain to the toy change depends on their knowledge of objects and object families. It seems that for familiar **kinds** of things (e.g., shoe, car, ball, dog, teddy bear, etc.), infants memorize only object features that are important and shared across all different instances of the given kind (e.g., being round is something shared by all the balls*).* This might make it difficult for them to differentiate individuals of the same kind, but might be very helpful when infants start to acquire generic knowledge.



The same object is revealed after the occlusion.

A new object from the same object family is revealed after the occlusion.



A new object from a different object family is revealed after the occlusion.

# Our Exciting News!

## Funding secured for new Wohl Wolfson ToddlerLab

We are delighted to announce that we have received £3.7 million to build a new ToddlerLab, thanks to generous donations from the Maurice Wohl Charitable Foundation and the Wolfson Foundation.

Building a new Lab especially for toddlers will allow us to continue to study development as babies get older (and more mobile!). Currently, the Babylab's facilities are not designed to study toddlers, who require more space as they carry out various daily activities, including walking and playing.

Using the latest wireless technologies, the Wohl Wolfson ToddlerLab will enable the advanced scientific study of brain development for children from 18 months to three or four years in an environment simulating familiar surroundings for toddlers. Studying brain activity during sleep will also be possible, thereby providing valuable data about how sleep impacts on child development.

***Artist's Impression***

The ToddlerLab will adjoin our building at 32 Torrington Square, where some of you may have participated in studies in the past. At the moment the ToddlerLab is still in the planning stages, but we hope for these exciting new facilities to open in spring 2016. We look forward to keeping you up-to-date with our progress!

# Our colleagues now have studies available for children aged 4-16 years

Does your baby have older siblings?

Psychologists at Birkbeck are looking for children aged **4 – 16 years** to participate in exciting research studies designed to improve our understanding of the many important psychological changes that occur on the path to adulthood.

In addition to the Babylab database that you have already signed up to, we now have a **Children's Research Register** that you can join online if you have an older child who might want to take part.

Joining our Children's Research Register will allow researchers to contact you about studies we are running that might interest you and your child. As with the Babylab, you would be called when your child is the right age for a particular study, and are under no obligation to take part; you can participate as many or as few times as you wish.

Like at the Babylab, all our studies are designed to be fun and engaging for children. Most involve watching videos, playing some kind of computer game or playing an interactive game with the researcher.

Testing sessions are conducted at Birkbeck in Central London, with reimbursement for your travel expenses. Some take part in the Babylab building but others are across this central campus (in or around Torrington Square, WC1E). The researcher will let you know exactly where to go for particular studies.

**Visit**
**http://www.cbcd.bbk.ac.uk/research**
**to sign up and learn more!**

## ANNOUNCING THE STAARS PROJECT
## Studying Autism and ADHD Risk in Siblings

We are very pleased to announce that we have begun a new longitudinal study of infants with older siblings. This study will build on the many exciting and important results from our previous British Autism Study of Infant Siblings (BASIS) studies. We are extremely grateful to all the families who participated in these studies, and we look forward to welcoming many new families into the next part of our project.

Our new study is called the STAARS project, which stands for Studying Autism and ADHD Risk in Siblings, and is funded by the Medical Research Council and EU-AIMS. As part of STAARS, we will continue to study infants with older siblings with autism. However, we will also be welcoming families who have an infant and an older child with attention deficit/hyperactivity disorder (ADHD) into our new study. ADHD affects many young children in the UK, and ADHD symptoms are very common in children with ASD. We think it is important to understand what early risk factors might be specific to ASD or ADHD, and which risk factors might be shared across the two conditions.

In the STAARS project, we will be looking at infants from very early in development. Families can join the study during pregnancy, or when their baby is up to 10 months old. With our partners at King's College London and the University of Cambridge, some babies will participate in our study in their first days of life. Other babies will come into our study when they are 3, 5 or 10 months old. We have study visits at 5 months, 10 months, 14 months, and 2- and 3-years. During visits we measure what infants like to do, what they are interested in looking at and how their brains are developing. All our games are designed to be fun for infants and their families. We hope that this will help us to learn more about early risk factors for autism and ADHD.

Another aspect of the STAARS project is that we are working in partnership with other research groups in Europe. Our colleagues in Sweden, the Netherlands and Belgium will be using some of our tasks with infants who have older siblings with autism, and we will be sharing our data with them. Joining together helps us to see whether our results can be applied to much larger groups of children, which is an important step in moving towards clinical applications of our research findings.

*Toddler Rowan helping with his DNA cheek swab*

**Do you have a child with autism and/or ADHD? Are you expecting a baby, or do you have an infant under 10 months?**

If you are interested in learning more about the STAARS study, please call Janice Fernandes on

**020 7079 0761**

or email us at **staars@bbk.ac.uk**

or visit our website **www.staars.org**

*We look forward to hearing from you!*

## A project you can take part in from home!

The University of Liverpool, alongside Lancaster and Lincoln Universities, would like to invite you to take part in the biggest UK study of children's first words! Called the UK Communicative Development Inventory (UK-CDI) Project, this is your chance to contribute to a huge study from the comfort of your own home.

Taking part is easy: all you have to do is fill in some short questionnaires about you, your baby and your baby's words and gestures. This should only take about 30 minutes.

Parents who take part will be contributing to cutting-edge research and will receive a unique, personalised memento of their child's reported words or gestures to keep as a lasting memory of their early development. They will also receive free access to the anonymised national database once it is ready.

If you would like to take part, or simply want to find out more, go to:

www.uk-cdi.ac.uk/take-part/

and sign up to receive a Parent Pack. This pack is sent out to your address and contains more information and the questionnaires. If you decide to take part, you simply fill in the questionnaires and send them back in a freepost envelope to the research team.

## Do you know any babies with Down syndrome?

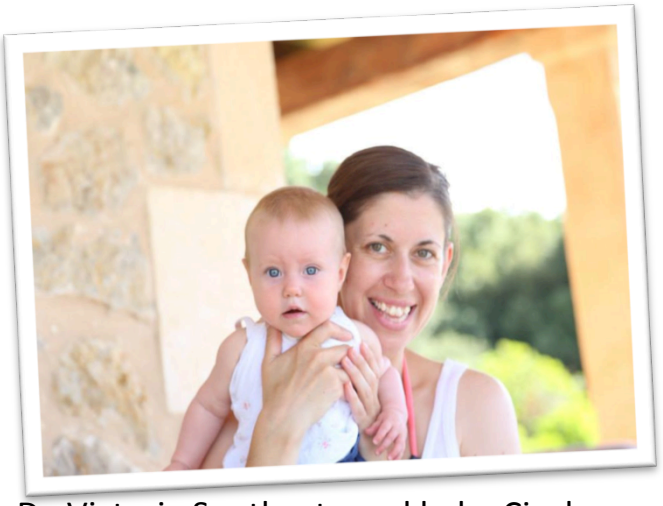
Babies with Down syndrome have an extra copy of chromosome 21 and one of the genes implicated in Alzheimer's (the APP gene) is located on that chromosome and thus over-expressed throughout development. Despite 100% of individuals with Down syndrome getting the brain pathology of Alzheimers by about age 30 years, not all go on to develop dementia. What protects those who do not? What are the risk factors for those who do?

Annette Karmiloff-Smith, with George Ball and Esha Massand, are studying babies with Down syndrome to see if they can identify early markers at the genetic, cellular, neural, cognitive, behavioural or environmental levels of risk and protective factors, that one could then target for intervention in early development. They've joined forces with a group at University College London who are studying adults with Down syndrome as well as with colleagues at St. Thomas Hospital, London who are imaging the brains of foetuses with Down syndrome who, after birth, will join our project. Infants and toddlers between 6 and 60 months come to the Babylab and do all sorts of fun tasks related to attention and memory.

**If you have a friend who has a young child with Down syndrome, do encourage them to contact us: downsyndrome@bbk.ac.uk.**
**We'd love to have them participate in our study!**

# Our New Arrivals

Finally, we would like to welcome the newest additions to our lab, the beautiful babies born to Babylab staff in 2013. Congratulations to everyone who welcomed a baby this year!



Dr. Victoria Southgate and baby Cicely, born 26/1/13

Kristen Swan-Tummeltshammer and baby Finn, born 30/10/13

Dr. Luke Mason and baby Elizabeth, born 25/5/13

Richard Henning-Brodersen and baby Sebastien, born 27/11/13

# Frequently Asked Questions……

**Q: I would like to visit the Centre, but would like to find out more about travel arrangements. How is it done?**

A: We will always cover any travel expenses up to maximum of £50 when you come to visit the Babylab. If you live **within a 5 mile** radius of the Babylab (according to our list of postcodes) we can provide a taxi service to our Centre. If you are **outside** our taxi zone you will need to make your own arrangements – just keep your receipts and we will reimburse you during your visit. Alternatively, if you chose to **drive** in, we have some parking spaces close to the Babylab. We will reimburse your petrol costs along with the congestion charge, though you will need to remember to pay it yourself on the day! If you are unsure as to how to pay the charge we can help you through the process during your visit.

**Q: Can I find out if my baby is developing normally from the data you collect during your studies?**

A: At the Babylab, we do not study the performance of individual babies. Our studies are not intended to be diagnostic tests that give results on the development of the individual - the information we receive from the babies is grouped to provide overall results.

**Q: What if my baby does not want to participate on the day?**

A: You should not feel badly if your baby decides they would rather not participate on the day of your appointment. This can be for many reasons: heat, teething, illness, tiredness, etc. Some babies just find the study too boring to look at. This does not mean that your baby will always react in this way during a study. Babies change day-to-day, hour-to-hour. We will be happy to ask you back for another visit if your baby comes within the appropriate age-range for another study.

**Q: What if my baby is asleep, hungry or needs changing upon arrival?**

A: Many babies fall asleep during their journey to the Babylab. We try to let the babies make their own schedule. We want happy babies so that they will be content to sit through our studies. If a baby is tired, hungry or wet, they are unlikely to want to participate. Therefore, we encourage you to carry on with their normal schedule as far as possible, even if it is during a visit. We have changing facilities at the Babylab and you can also feed your baby in the reception area. Water, tea and coffee are always available for parents and carers. However, if you know that your baby naps/eats regularly during certain hours, please mention this when booking an appointment.

**Q: I received my packet of information from the Babylab months ago, but I've not been asked to participate in a study . . . will I get a call?**

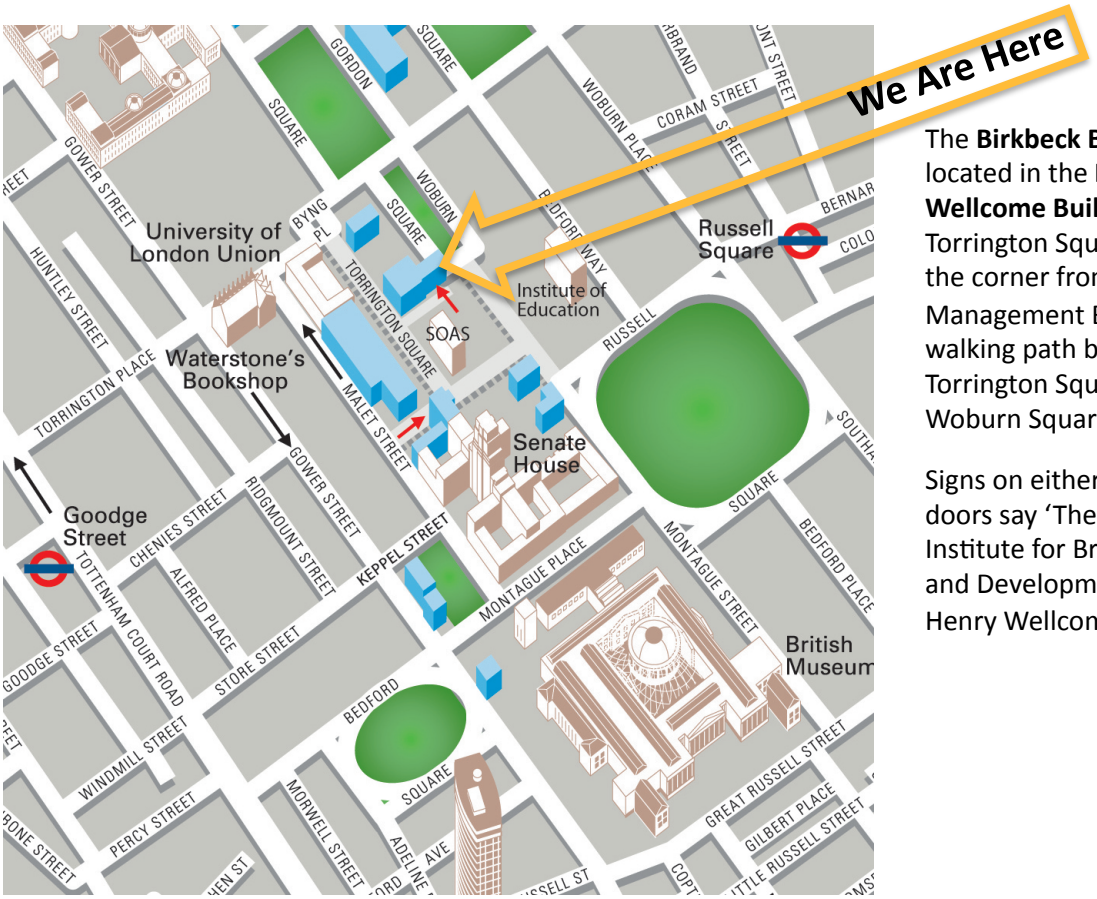
A: Whether or not you are called for an appointment is completely dependent on the studies that are currently running. Each study has an age range that is specific to a particular stage of infant development. If you have not been contacted it is not because we have forgotten about you, it is only because your baby does not fit into the age range of one of our current studies. Our studies are constantly beginning and ending so new opportunities may arise!

**Q: Do you ever need adult participants for your studies?**

A: Yes. Sometimes we do run studies and require adult subjects. There are also other studies running within the Department of Psychology at Birkbeck College.

If you are interested, you can fill out a Volunteer Form at:
https://psyc-bbk.sona-systems.com/student_new_user.aspx

# How to find us……




The **Birkbeck Babylab** is located in the **Henry Wellcome Building**, just off Torrington Square, around the corner from the Clore Management Building (on the walking path between Torrington Square and Woburn Square).

Signs on either side of the doors say 'The Wolfson Institute for Brain Function and Development' and 'The Henry Wellcome Building'.

We are within *walking* distance from the following stations: **Russell Square, Goodge Street, Euston, Euston Square, Warren Street, Kings Cross and St Pancras.**

**If driving and using satnav, please input WC1H 0AA** (not our building) **to take you to Woburn Square**.

The Babylab has two areas available for parking: **Woburn Square** (both sides) and **Torrington Square.** Woburn Square is easier to access within the one-way system in this area. To enter Torrington Square you must make your way through the one-way system to Keppel Street to get into Malet Street. Turn left in to Malet Street then a little way down, make a right turn through the University of London gates. Drive a little way then turn left into Torrington Square (drive down the slope) and park on the right-hand side of the square. When you arrive at the Babylab, **we will provide you with a temporary parking permit**. If you are staying overnight for a study, we recommend that you park on Torrington Square to guarantee a parking space.

**Taxi drivers**: Please ask the driver to drop you outside **28 Woburn Square, WC1H 0AA** (not our building). Once at the top of the square turn right and walk up the paved slope. The Henry Wellcome Building is a new building on the right.

# Join the Babylab or Update your Information!

Don't lose touch! If you are moving house or having another baby please let us know so that we can update our records. Ring us on **020 7631 6258**, return the form below or contact us via e-mail at **babylab@bbk.ac.uk**.

If you have a friend who you think may enjoy a visit to the Babylab **please ask them to contact us too**. We are constantly in need of babies from birth to twelve months to help us with our research.

For new recruits you can return the form below to:

**The Babylab**
**FREEPOST RRGX-ARGH-SESR**
**Centre for Brain & Cognitive Development**
**The Henry Wellcome Building**
**Birkbeck, University of London**
**Malet Street**
**London WC1E 7HX**

Or even more easily, sign up online! We now have an online form you can use by clicking on the 'Register Your Baby' link on the website: www.cbcd.bbk.ac.uk/babylab

For all other enquiries, please phone or email!
Tel: **020 7631 6258**
E-mail: **babylab@bbk.ac.uk**

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**Parent's name**_____ **Telephone**_____

**Email**_____

**Address**_____

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**Baby's name**_____

**Sex**_____ **DOB (or expected date)**_____