

## THANK YOU

We would like to thank you for your continued involvement in the Barwon Infant Study. Each of the BIS families and participants are irreplaceable and your ongoing involvement makes a vital contribution towards understanding how to best provide children with a healthy start to life.

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### Staying in contact with you

BIS is a longitudinal study so our research looks at what has changed over time. It is very important that we are able to stay in touch with you.

If your personal details change, it would be much appreciated if you could inform us on:

Call/SMS: 0400 432 976/421 53384

Email: [bis@barwonhealth.org.au](mailto:bis@barwonhealth.org.au)



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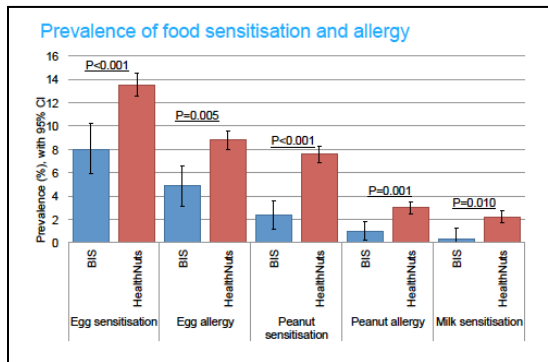
*Scobie &  
Claire  
MacKinnon  
Trust*

**Our Women's Our  
Children's  
Fundraising Committee.**



**Dear BIS families,**

In the coming few weeks we will complete the final 1 year review. Approximately 12% of the children in BIS have demonstrated allergic sensitisation on skin prick testing at 1 year of age and just under 7% have actual food allergy on testing in the Geelong Hospital. These figures are high, but interestingly, they are quite a bit lower than those from the HealthNuts study in Melbourne a few years ago. This is despite that fact that more kids in BIS than HealthNuts had a family history of allergic disease. The difference in allergy rates relates partly to ethnic factors (there are more people of Asian background in HealthNuts) and microbial factors (more sibling, pets and farm exposure in BIS) but are still largely unexplained. Now that the whole cohort has reached a year of age we have a whole host of papers that we can finish and write up.



Over the coming year we will be:

- Describing the prevalence of food allergy and eczema in the Barwon region and comparing that to Melbourne;
- Reporting on the relationship between maternal folate levels during pregnancy and BIS baby's risk of allergy;
- Reporting on the relationship between maternal and infant vitamin D status and allergic disease;
- Reporting on the relationship between the baby's poo samples at 1 month of age and food allergy at 1 year;
- Investigating the environmental factors that influence the composition of the infant's gut microbiome over early life.

We look forward to sharing these findings and papers with you on the Website and at the Participant Forums.

Thanks for being involved in this important study. Together we've put together something truly unique that promises to provide answers to some of the most important questions about how to provide our children with a healthy start to life.

Best wishes,  
Dr Peter Vuillermin

Associate Professor Peter Vuillermin  
Principal Investigator  
Barwon Infant Study



**BECOME OUR FRIEND ON FACEBOOK**  
Very soon we will be launching our Facebook page, allowing a platform for us to share with you exciting updates, the latest researching findings and information on our participant forums. We will notify all of our participants when our page goes live, so keep an eye out for an invite!

**UPDATE ON BIS BIOSAMPLES**

Birth cohort studies are recognized internationally as an important platform for the investigation of childhood diseases. Here at BIS we have established a world-class cohort with a uniquely detailed array of physiological measures and clinical outcomes - complemented by a comprehensive collection of relevant **biological samples**.

The aim of BIS and the laboratory team at Barwon Health has been to establish a state-of-the-art Biorepository for all the important **biosamples**. When they arrive at the labs they are catalogued in a database, processed and/or individually aliquoted, barcoded, and stored.

As of November 2014 we now have more than **90,000 individually aliquoted biosamples** that are stored in one of: (i) three large -80°C freezers (ii) five liquid nitrogen storage tanks (-160°C), (iii) -20°C chest freezers or (iv)

storage boxes. Samples that have been removed for validation or experimental studies have displayed excellent viability and reproducible measures for all biological factors. In addition, with specimens from mothers, newborns, and infants, BIS holds one of the best groups of longitudinal stool samples in the world!



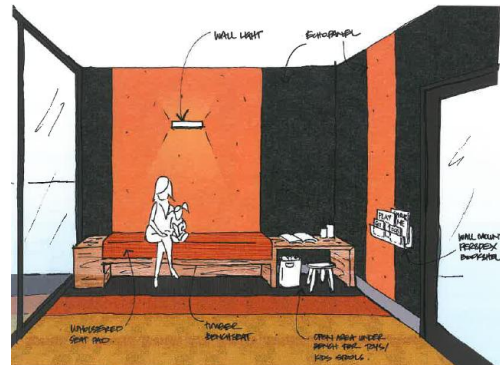
**GET READY, BIS IS ON THE MOVE!**



From the middle of next year BIS participants will be enjoying some new scenery when visiting the BIS team, as we are moving to Level 2 in the TTR building.

We are very excited to be re-locating to a building specially designed for medical research and education conveniently located just behind Kitchener House.

For all of you that braved the ancient lift, yes this does mean a brand new lift with automatic doors and no wooden interiors to be seen.



The TTR building, we will be located on level 2.

**THE NEXT EXCITING STAGE...THE PRECHOOL REVIEW**



**PREGNANCY    4 WEEKS    6 MONTHS    9 MONTHS    12 MONTHS    2 YEARS    PRESCHOOL.....TO BE CONTINUED**

Since your enrollment during pregnancy we have had the opportunity to follow your journey with your child, gathering valuable information at the various stages of participation. This has allowed the BIS team to contribute to the scientific knowledge of how early life factors influence health and disease into adulthood.

The preschool review focuses on cardiovascular health, respiratory health, neurodevelopment and physical activity. We measure your child's growth and body composition, such as height, weight and skin fold thickness, as we have done since birth. We perform ultrasounds looking to measure the thickness of the wall in arteries. This ultrasound was performed on many BIS babies at about four weeks of age and will enable us to investigate changes overtime in BIS children.

We also assess your child's lung function. This test will measure how long it takes to breathe out nitrogen that is naturally found in the lungs. It is a simplified version of the lung function test performed in many BIS babies at about four weeks of age. Never before have these two measurements been completed in a study as large and detailed as BIS.

The information we gain from this study is likely to help develop strategies that may reduce the risk of disease among children and adults in Australia and around the world. Thank you to all the BIS children and their families who make this all possible.

### PRESCHOOLER DEVELOPMENT BY RAISING CHILDREN NETWORK

Your preschooler's development is progressing rapidly. Play stimulates the brain and helps them start making sense of the world. Play also helps your child build confidence, feel loved and develop communication, social and physical skills. All children develop at different rates, but if you are worried about your child's development, speak to your doctor or child health nurse.

At **3-4 years**, preschoolers:

- start to socialise, understand other people's feelings and manage their own emotions
- are good with their hands and better coordinated
- speak more clearly, understand hundreds and hundreds of words, and use more complex sentences.

At **4-5 years**, preschoolers:

- look for structure and routine in their lives
- ask lots of questions about people and the world
- love moving and being active, and develop new skills like skipping or jumping backwards
- make conversation, understand thousands of words and love silly jokes and words
- are curious about bodies and sexuality.

This article is an extract only. For more information, visit [raisingchildren.net.au/development/preschoolers\\_development.html](http://raisingchildren.net.au/development/preschoolers_development.html). Sourced from the Raising Children Network's comprehensive and quality-assured Australian parenting website [raisingchildren.net.au](http://raisingchildren.net.au)

### BIS BABY NAMES

Aaliyah Abigail Adele Adeline Adley Aiden Alana Alannah Alastair Alby Aleahya Alex Alexander Alexandra Alexis Alfie Alice Alivia Allera Amelia Amelie Andrea Angelina Angus Anise Anna Annabelle Annie Anouk Anwita Aoifi April Arabella Archer Archie Aria Arie Arlo Ash Asher Ashley Ashton Aston Astrid Athena Audra Audrey Audrie Augusteen Ava Axl Ayda Ayla Baden Basil Baxter Beau Benjamin Bentley Billy Birgitta Blaize Bo Braya Brennan Bridie Brielle Brooke Brooklyn Bryn Buddy Caitlan Caitlin Caleb Calista Callum Cambria Campbell Cara Cardi Carla Carrie Casper Cassia Cassidy Celeste Charles Charlie Charlotte Chaz Chloe Christian Chyna Ciaran Claire Clancy Claudia Cohen Cooper Costa Craig Cruize Curtis Daisy Dajarra Dalton Dana Darragh Darsh Davey Devan Dillan Dominic Dylan Eadie Ebony Eden Edison Edward Eli Elian Elijah Elisabeth Eliza Elizabeth Ella Ellery Ellia Ellie Elliot Elodie Eloise Elsa Emeline Emerson EmiliaJane Emily Emma Emmett Erica Lily Estelle Esther Ethan Eva Eve Evelina Evelyn Evie Ewan Felix Finn Finnegan Finnian Fletcher Flynn Fox Frances Francesca Frankie Fraser Jack Freddie Fynn Gemma Georgia Georgina Gianni Giles Grace Gracey Gracie Grainger Greta Gretel Griff Gypsy Hay Hamish Hannah Haris Harley Harlow Harper Harriet Harris Harrison Harry Harvey Hazel Heath Heidi Henry Heston Holly Hudson Hugh Hunter Iluka Imogen Indi Indira Isaac Isabel Isabell Isabella Isabelle Isaiah Isla Isobel Ivy Jack Jackson Jacob Jai Jai Jaidan Jake Jakeb James Jamie Jarvis Jaxon Jayden Jed Jem Jenson Jessica Jet Jillian Jock Joel Jonah Jonathan Jordan Jordynne Joseph Joshua Judah Jude Justus Kaden Kaitlyn Kaiya Kalina Kami Kasey Katelyn Kayden Kaylee Kenzie Kiahna Kiara Kieran Kikki Kimberly Kirrily Kobe Kobie Kodi Krish Kristian kyan Kyra Lacey Lachlan Lana Layla Leila Leni Lenny Leo Leonard Levi Lexi Lexie Liam Lila Lilli Lillian Lilly Lily Lincoln Linkan Lloyd Lola Louisa Luc Lucas Lucie Lucinda Lucy Luka Lux Macey Mackenzie Madison Maeve Maggie Maidie Maisie Maisy Mak Makayla Malakai Malia Malik Marcus Mariyah Marley Marli Marvin Mason Matilda Max Max Maxwell May Maya Maynard Meg Mia Miami Micah Micaiah Michaela Mietta Mila Milan Miles Milla Miller Millie Milly Mimoso Mirabelle Mitchell Molly Murphy Myles Nait Nate Nathan navy Ned Neisha Neve Niall Niamh Nicholas Nina Noah Nyah Octavia Oliver Olivia Ollie Orlando Oscar Owen Paige Paris Parker Patrick Paxten Penny Perry Phillippa Phoebe Pia Piper Pippa Poppie Poppy Quade Rachel Rafael Ransom Reeve Reggie Rhys Rikki Riley Rivah Roseangela Ruben Rubi Ruby Ryan Ryder Rylan Sadie Saffron Sahara Sally Sam Samson Samuel Sarah Sascha Savannah Scarlett Sebastian Sebastiano Seth Shari Shiloh Siarra Sienna Sofia Sol Sophia Sophie Spencer Stella Stephanie Sullivan Summer Sydney Symphony Tait Taj Tallow Tanna Tawlu-Saeh Taylah Taylor Thatcher Thea Thomas Tiana Tiffany Tilly Timothy Tirranna Tora Tullulah Tully Tyler Van Vincent Violet Viraaz Will William willis Willow Wilson Winifred Winni Winter Wolfgang Xabian Xander Xavier Zac Zachary

## MERRY CHRISTMAS & HAPPY NEW YEAR!

*The BIS Team would like to wish everyone a safe and happy festive season.*

*We look forward to seeing everyone in 2015 and hearing your holiday stories.*



### BIS Contact Details

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