Welcome to the third edition of the GCNC NIDCAP Newsletter for 2017. If you would like to contribute to the newsletter please contact: Nadine.griffiths@health.nsw.gov.au

Infant State: Crying

| Body Activity                  | Increased motor activity, skin color darkens |
| Eye Movements                  | Tightly opened or closed eyes |
| Facial Movements               | Grimaces |
| Breathing Pattern              | More regular than in other states |
| Level of Response              | Extremely responsive to unpleasant internal or external stimulation |

Implications for Caregiving
- Infants cry in response to unpleasant stimuli or when their limits have been reached
- More mature infants may be able to console themselves
- Most infants require assistance from parents or caregivers to transition to a lower state
- Support consists of addressing needs i.e. hunger, pain. Consider using cuddling and containment

The Dual Nature of Early-Life Experience on Somatosensory Processing in the Human Infant Brain

This paper explores touch experiences in the NICU and found:
- NICU treatments for improving neurodevelopmental outcomes rely heavily on touch
- Perinatal somatosensory experiences may scaffold later development
- Supportive experiences (e.g., breastfeeding, skin-to-skin care) are associated with stronger brain responses, whereas painful experiences (e.g., skin punctures, tube insertions) are associated with reduced brain responses to the same touch stimuli.

Maitre et al., 2017, Current Biology 27, 1–7 April 3, 2017

Practical application of Developmental Care

Some of the feedback we receive from staff relates to how DC can be applied in the clinical setting some components that can be easily implemented include:
- **Scent** – maternal scent i.e. use of scent pads promotes bonding and attachment
- **Kangaroo care** – time on mum or dad’s chest is proven to decrease HR, RR, improve sleep & self-regulation during and post KC.
- **Individualized** – bedding i.e. nests, lighting, positioning and feeding (i.e. hold during NG feeds) will help support each infants unique needs