

## Evolution of Socially Transferred Materials (Lorentz Center Workshop 2024)

<b>Day 1</b>   11 November	
10:30	Lorentz Center welcome
10:45	Welcome from scientific organisers, laying out our goals for the workshop
11:00	Ice breakers
12:00	~~~ Lunch ~~~
13:30	Intro to our vision of Socially Transferred Materials and the terms we use
14:30	Interactive discussion: burning questions and what we all want from this workshop
16:00	~~~ Coffee break ~~~
16:30	<b>S1:</b> Adria LeBoeuf   Metabolic division of labour and social transferred materials (20+5)
16:55	<b>S1:</b> Bart Pollux   The evolution of the placenta in livebearing fishes (20+5)
17:20	<b>S1:</b> David Skerrett-Byrne   Kingdom of reproductive life; core sperm proteome (20+5)
17:45	Day 1 close: What are our take-aways and shifts in perspective?
18:00	~~~ Welcome Reception ~~~
<b>Day 2</b>   12 November	
09:00	Warm-up
09:20	<b>S2:</b> Joris M. Koene   Socially transferred materials in the context of simultaneous hermaphroditism (20+5)
09:45	<b>S2:</b> Melissa Rowe   Animal mating in a microbial world (10+3)
09:58	<b>S2:</b> Maria Margalef   Effect-directed analysis in human breast milk to identify chemicals with potential to bind to the thyroid hormone transport protein Transthyretin (10+3)
10:11	<b>S2:</b> Arthur Matte   On the gene evolution underlying secretion systems (10+3)
10:24	What are our take-aways and shifts in perspective?
10:35	~~~ Coffee break ~~~
11:00	<b>S3:</b> Jenny Stynoski   Do mother poison frogs supplement poisonous nutritive eggs with secretory provisioning? (20+5)
11:25	<b>S3:</b> Sanja Hakala   Socially transferred molecules in crop milk – a mechanism for social control in a polymorphic ant? (15+3)
11:43	<b>S3:</b> Ton Grootuis   The importance of hormones as socially transferred fluids (15+3)
12:01	What are our take-aways and shifts in perspective?
12:10	~~~ Lunch ~~~
13:40	Warm-up and wild ideation
14:00	<b>S4:</b> Aniko Korosi   The role of breast milk metabolome composition in transmission of maternal stress to her offspring (15+3)
14:18	<b>S4:</b> Steven Ramm   Seminal fluid allocation, function and evolution (15+3)
14:36	<b>S4:</b> Pranas Grigaitis   Economic & organizational principles of co-living metabolisms (10+3)
14:49	What are our take-aways and shifts in perspective?

15:00	~~~ Walk in Bosman forest ~~~
16:30	~~~ Coffee break ~~~
17:00	Methodology chalk talk session
18:00	Day 2 close: Links and gaps
<b>Day 3   13 November</b>	
09:00	Warm-up
09:20	<b>S5:</b> Lisa M. Schulte   Traumatic mating in amphibians: male frogs ( <i>Plectrohyla</i> , Hylidae) use their teeth to inject females with SPF-pheromones (15+3)
09:38	<b>S5:</b> Jen Perry   Sexual conflict and the evolution of insect reproductive phenotypes (15+3)
09:56	<b>S5:</b> Rahia Mashoodh   Social behaviours and the evolution of genome architecture (10+3)
10:09	What are our take-aways and shifts in perspective?
10:20	~~~ Coffee break ~~~
11:00	<b>S6:</b> Anja Buttstedt   Food jellies of honey bees - significance of major royal jelly proteins and sterols (15+3)
11:18	<b>S6:</b> Bas Teusink   Socially transferred materials, a microbial perspective (15+3)
11:36	<b>S6:</b> Yuqi Wang   Larval storage proteins and metabolic division of labour in ants (10+3)
11:49	What are our take-aways and shifts in perspective?
12:00	~~~ Lunch ~~~
13:40	Warm up and wild ideation
14:00	<b>S7:</b> Elva Robinson   Cooperation between groups: networks of food transfer between ant nests (15+3)
14:18	<b>S7:</b> Aileen Berasategui   Origin & evolution of a defensive symbiosis in tortoise beetles (15+3)
14:36	<b>S7:</b> Takumi Saito   The possible role of SFPs in reproductive isolation of the great pond snail, <i>Lymnaea stagnalis</i> (10+3)
14:49	~~~Brief pause~~~
15:00	Synthesis activity
16:00	~~~ Coffee break ~~~
16:30	Day 3 close: Goal setting and division of labour for Day 4 and Day 5
19:00	~~~ Workshop Dinner ~~~
<b>Day 4   14 November</b>	
09:00	Warm-up
09:15	Scientific mediation: knowledge limits and how to find satisfying answers
10:30	~~~ Coffee break ~~~
11:00	Scientific mediation: achieving satisfying answers
12:00	~~~ Lunch ~~~
13:30	Warm-up
14:00	Individual, duo, and collective thinking activity

16:00	~~~ Coffee break ~~~
16:30	Targeting grant opportunities and follow-up goals
17:30	Day 4 close: summarising plans for Day 5
<b>Day 5</b>	<b>15 November</b>
09:00	Warm-up
09:15	Build teams, dive in to writing projects and grant opportunities
11:40	Team summaries
12:00	~~~ Lunch ~~~
13:30	Warm-up
13:40	Teams build roadmaps of concrete post-workshop plans
15:00	Team summaries
15:30	Closing by scientific organisers