



# NEOMUNE research platform – work package synopses

## WP 4.1: NEOMUNE administration and dissemination

**1. Related WPs, MG contact person:** Synergies with WPs 4 and WP 1.7. MG contact: Stine Bering, Per Sangild

**2. Key involved personnel, their institution and mail address (project leader + main study site underlined):**

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Thomas Thymann, Ass. Prof., Clinical and Experimental Nutrition, Univ. Copenhagen, ttn@life.ku.dk, 10%, MG)  
Yanqi Li, post doc, Clinical and Experimental Nutrition, Univ. Copenhagen, yli@life.ku.dk (5%)

MG = Management Group; SAB = Scientific Advisory Board; GB = Governing Board.

**3. Main aim and sub-aims:**

Main aim: To develop effective management and leadership of NEOMUNE over the 6-year project period.

- To maintain effective and open leadership via the Management Group (MG) and the Head of Project (HP).
- To obtain maximal inspiration and guidance from the Governing Board (GB) – the strategic advisory board.
- To obtain maximal inspiration and guidance from the Scientific advisory Board (SAB).
- To secure good working collaboration with associated industrial partners.
- To secure the frame for the work relationships, in part by appropriate scientific, legal and ethical contracts.
- To secure optimal and timely scientific reporting to the Danish Research Councils.
- To secure optimal and timely financial reporting to the Danish Research Councils.
- To secure adequate communication to NEOMUNE participants and to the public (e.g. NEOMUNE website).
- To solve unforeseen scientific and/or managerial conflicts and challenges in NEOMUNE.
- To apply for funding that aims to expand the present activities and extend NEOMUNE beyond 2018.

**4. Background and a central hypothesis:**

The scientific and administrative leadership in NEOMUNE is divided among partners, affiliated partners and collaborators, as indicated in the original application. While NEOMUNE may provide the main funding for some projects, for others it only constitutes a small part of the total project expenses. NEOMUNE is a dynamic research platform that incorporates and integrates with new synergistic projects as these become apparent. The NEOMUNE research platform aims to expand the total number of interventions, sample analyses and research outputs from studies that are not entirely financed by NEOMUNE.

The NEOMUNE Management Group (MG) is the main leadership group and represents the main work areas from infants (coordinated by GG), pigs (TT) and mice (HF) to the important milk and microbiota analyses (DN).



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The program head (PS) is supported by an academic secretary (Stine Bering) and a technical secretary (Christina Kelager). A Governing board (GB) is formed to enable to the greatest possible long-term, strategic impact of the project (“strategic advisory board”). It will handle the major strategic decisions regarding a) project leadership and partner structure, b) long-term financial considerations, c) ethical and legal challenges, d) infrastructure, and e) legal contracts among universities, hospitals, industries. A Scientific Advisory Board (SAB) is formed to provide critical inputs into the scientific quality of NEOMUNE at all work package levels. Based on an annual progress report by the MG, the GB and SAB are invited to give critical comments to work at all levels (rationale, protocols, analyses, interpretation, publication, societal effect, leadership structure).

**Leadership philosophy in NEOMUNE.** To maintain creativity, enthusiasm and focus on results, research groups are given freedom to work within the given framework defined by NEOMUNE and its MG. The projects that are financed to the largest degree by NEOMUNE have the greatest responsibility to adhere closely to NEOMUNE strategies. In close connection with the GB, SAB and MG, the HP will assist in adapting work plans for the best possible NEOMUNE outcome. We are aware of both potentials and limitations of working closely with industry partners in NEOMUNE. The working relationship is guided by separate contracts (Part Project Agreements) with each industrial partner on specific parts of the project. Just as important, it is based on respect for the complementary values of university, hospital and industrial partners.

*We hypothesize that pro-active management and leadership, good communication and adequate trust-building among university, hospital and industry partners in NEOMUNE lead to a lasting research and societal outcome.*

### 5. Key analyses and methods:

- Frequent meetings for the MG board, with minutes published at NEOMUNE website.
- Contact with the SAB and GB at least once annually.
- Formation of legal contracts among partners.
- Initiate the annual scientific meetings.
- Scientific reports to the Danish Research Councils.
- Financial reports to the Danish Research Councils.
- Maintenance of the NEOMUNE website.

### 6. Expected results:

- High research output and societal implications of NEOMUNE.
- A reasonable degree of satisfaction among NEOMUNE participants, individuals and institutions.
- A long term impact of the collaborations in NEOMUNE, beyond the project period.

### 7. Estimated time frame

Task	2013				2014				2015				2016				2017				2018			
MG meetings	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MG meeting with GB		x	x	x	x				x				x				x				x			
SAB contact		x			x				x				x				x				x			
Scient. report to DSF					x				x				x				x				x			
Financial report to DSF					x				x				x				x				x			
Platform contract sign		x																						
Sub-project contracts			x	x	x																			

### 8. Estimated budget from NEOMUNE: 3.0 mio DKK

20-30% salaries for academic administrator, administrative post doc, secretary and HP.

### 9. Estimated budget from elsewhere: None

### 10. Additional comments:

- The total budget for WP 4.1 should be seen in connection with the budgets for WPs 4.2+4.3



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## WP 4.2: Scientific meetings and results dissemination

**1. Related WPs, MG contact person:** Synergies with WPs 4. MG contact: Stine Bering

**2. Key involved personnel, their institution and mail address (project leader + main study site underlined):**

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Dennis Nielsen, Ass. Prof., Dept. Food Science, Univ. Copenhagen, [dn@life.ku.dk](mailto:dn@life.ku.dk) (10%, MG)

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Thomas Thymann, Ass. Prof., Clinical and Exp. Nutr., NEXS, Univ Copenhagen, [ttn@life.ku.dk](mailto:ttn@life.ku.dk) (10%, MG)

**3. Main aim and sub-aims:**

- a) To secure effective exchange of scientific ideas within the NEOMUNE field and help steer the subprojects.
- b) To secure effective results dissemination (scientific and/or societal) from NEOMUNE projects, press contact.
- c) To maximize synergy among individuals, groups and institutions/companies/hospitals within NEOMUNE.

**4. Background and a central hypothesis:**

NEOMUNE will seek international exposure and impact by hosting a common partner meeting once per year. Most often this will be held as a satellite meeting to the annual congress of one of two relevant European scientific societies (ESPR or ESPGHAN). In addition to this larger platform meeting, involving researchers and stake holders at all levels, the MG arranges one general scientific meeting that involve the current main research leaders and representatives of GB and SAB, aimed to evaluate the overall research. All university-, hospital- and company-based key personnel, and the SAB, are expected to join at least one main platform meeting per year.

In addition to the general scientific assemblies, sub-meetings are held for clusters of projects (NEOMUNE subgroups, see section 7 below) within NEOMUNE. The MG groups take the initiative to formation of such clusters and each group is responsible for reporting back to the MG on both scientific and administrative issues. Scientific results, both positive and negative, will published in international, recognized journals with relevant review competence and readership. Where relevant, we will aim to co-publish results on the same intervention from different study levels (infants, pigs, rats, isolated cells). We also seek to co-publish natural and social science results in the same scientific (review) papers. The NEOMUNE website will play a central role for results presentation, using public open access, and sections closed to the public.

*We hypothesize that a minimum two personal meeting encounters for key researchers, and one meeting encounter for the other researchers, are necessary for NEOMUNE project coherence and research output.*

*Subgroups of project clusters are encouraged to arrange separate meetings as required and report to the MG.*

**5. Key analyses and methods:**

- a) Effective platform meeting organization initiated by the MG.
- b) Effective sub-group meeting organization initiated by the subgroup leaders.
- c) Evaluation of meetings by the MG and the sub-group leaders.
- d) Appropriate and adequate use of the NEOMUNE website.
- e) Coordination, control and evaluation of public press about NEOMUNE.

**6. Expected results:**

Effective and enjoyable meetings that maximize use of time/money and increase NEOMUNE research output  
Adequate and effective communication of NEOMUNE results to the scientific community and to the public



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### 7. Estimated time frame

Task	2013			2014			2015			2016			2017			2018		
NEOMUNE general meetings	x	x	x	x			x	x	x	x			x		x	x		x
*Group infant probiotic (GG)	x		x	x		x	x		x	x		x	x		x	x		x
Gr. infant birth, AB, GM (DN)	x		x	x		x	x		x	x		x	x		x	x		x
Group pig anti/probiotics(TT)	x		x	x		x	x		x	x		x	x		x	x		x
Group mice anti/probiot.(HF)	x		x	x		x	x		x	x		x	x		x	x		x
Group piglet gut-brain (AA)	x		x	x		x	x		x	x		x	x		x	x		x

\* The indicated frequency of sub-group meetings is shown only as a guideline for expected meeting intervals

### 8. Estimated budget from NEOMUNE: 0.5 mio DKK

Mainly to cover platform meeting expenses and invitation to GB and SAB members.

### 9. Estimated budget from elsewhere: 0.5 mio DKK

Local administrative support not funded by NEOMUNE.

### 10. Additional comments:

- The NEOMUNE research platform consists of a large, diverse number of core participants from hospitals, universities and industries. As such, it cannot be expected that the platform meetings will be able to cover all aspects of the research. Focus is placed on forming scientific subgroups in NEOMUNE, and corresponding subgroup meetings. Subgroups are dynamic and meant to connect research areas that are relatively closely connected in scientific methodology and research questions.



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## WP 4.3: Training and education

<p><b>1. Related WPs, MG contact person:</b> Synergies with WP4.1, 4.2. MG contact: Per Sangild, Gorm Greisen</p>																																																																					
<p><b>2. Key involved personnel, their institution and mail address (project leader + main study site underlined):</b>            Christina Kelager, secretary, Clinical and Experimental Nutrition, Univ. Copenhagen, <u>kelager@life.ku.dk</u>            Elin Skytte, personal coach, Clinical and Experimental Nutrition, NEXS, Univ. Copenhagen, <u>els@life.ku.dk</u> (5%)            Gorm Greisen, Prof., Neonatology, Copenhagen University Hospital, <u>Gorm.Greisen@regionh.dk</u> (5%, MG)            Mie Seest Dam, PhD stud., Dept. Public Health, NEXS, Univ. Copenhagen, <u>mda@sund.ku.dk</u> (5%)  <u>Per Sangild, Prof., Clinical and Experimental Nutrition, NEXS, Univ. Copenhagen, <a href="mailto:psa@life.ku.dk">psa@life.ku.dk</a></u> (5%, MG)            Stine Bering, Clinical and Experimental Nutrition, NEXS, Univ. Copenhagen, <u>sbs@life.ku.dk</u> (5%, )            Zhu Yanna, Ass. Prof., School of Public Health, Sun Yat-sen University (5%)</p>																																																																					
<p><b>3. Main aim and sub-aims:</b>            a) To provide appropriate general scientific training for young researchers (PhDs, post docs) in NEOMUNE.            b) To provide appropriate leadership training for young researchers (PhDs, post docs) in NEOMUNE.            c) To provide possibility for personal counseling and support for all researchers in NEOMUNE.</p>																																																																					
<p><b>4. Background and a central hypothesis:</b>            NEOMUNE facilitates training for many young investigators across wide scientific disciplines, and in new collaborative networks that hopefully exceed the NEOMUNE project period. NEOMUNE makes deliberate attempts to place younger researchers, with limited training in leadership positions where they develop leadership skills (e.g. as project leaders, or as part of MG and NEOMUNE subgroups). Careful supervision is required and/or personal counseling is the natural responsibility of a well-functioning research team. Besides the PhD students specifically sponsored by the NEOMUNE funds, the project will create training possibilities for a number of other PhD students and young researchers. To obtain and maintain enthusiasm for biological research, it is important that young scientists are able to put their own scientific method and understanding into a greater methodological and scientific perspective. Working with scientists from other fields (even across the domains of natural, social and human science) and across countries, make it clear that the basis of scientific epistemology differ widely. PhD students will be encouraged to participate in the 6 ECTS PhD course in “Food, Medicine and Philosophy in East and West” (<a href="http://www.courseinfo.life.ku.dk/Kurser/phd_fmp.aspx">http://www.courseinfo.life.ku.dk/Kurser/phd_fmp.aspx</a>; lead by PS) and in a 2 ECTS course in Pediatric Research (lead by GG). These courses will train students to know the potentials and limitations of research methods directed towards infants and children. The course will seek to place maximal focus on aspects that are relevant for NEOMUNE.  <i>We hypothesise that careful attention to the widely differing career and personal goals of younger researchers will enable NEOMUNE to foster mature researchers and good leaders with personal integrity.</i></p>																																																																					
<p><b>5. Key analyses and methods:</b>            a) A PhD course in Pediatric Research will be offered to PhD students.            b) A PhD course in Food, Medicine and Philosophy in East and West will be offered to PhD students.            c) Younger investigators will be encouraged to form young investigator subgroups.            d) Younger investigators will be offered personal coaching, by a certified coach.</p>																																																																					
<p><b>6. Expected results:</b>            Development of mature researchers that become not only good researcher but also good research leaders</p>																																																																					
<p><b>7. Estimated time frame</b></p> <table border="1"> <thead> <tr> <th>Task</th> <th colspan="3">2013</th> <th colspan="3">2014</th> <th colspan="3">2015</th> <th colspan="3">2016</th> <th colspan="3">2017</th> <th colspan="3">2018</th> </tr> </thead> <tbody> <tr> <td>Pediatric Research course</td> <td>x</td><td></td><td></td> <td></td><td>x</td><td></td> <td></td><td>x</td><td></td> <td></td><td>x</td><td></td> <td></td><td>x</td><td></td> <td></td><td>x</td><td></td> </tr> <tr> <td>FMP PhD course</td> <td></td><td></td><td></td> <td>x</td><td></td><td></td> <td></td><td></td><td></td> <td>x</td><td></td><td></td> <td></td><td></td><td></td> <td></td><td></td><td>x</td> </tr> </tbody> </table>													Task	2013			2014			2015			2016			2017			2018			Pediatric Research course	x				x			x			x			x			x		FMP PhD course				x						x								x
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**8. Estimated budget from NEOMUNE:** 0.25 mio DKK

**9. Estimated budget from elsewhere:** 0.5 mio DKK

Funding sought from external sources and internal university co-funding.

**10. Additional comments:**

- Basic science researchers in NEOMUNE are encouraged to become familiar with clinical routines at hospital partners in NEOMUNE.
- Clinical staff related to NEOMUNE hospital departments are encouraged to become familiar with the scientific routines of basic science partners in NEOMUNE.
- The exchange of researchers among different NEOMUNE labs constitutes an additional important training activity. Specific university-university collaboration agreements will be sought between specific partners (e.g. Univ. Copenhagen, Sun Yat-sen University).
- NEOMUNE researchers are encouraged to take part in academic teaching activities when this is NEOMUNE-relevant and possible within the set time as defined by the research plan.