



Ludwig Boltzmann Gesellschaft

OPEN INNOVATION IN SCIENCE

*Mit neuen Methoden
gesellschaftliche
Herausforderungen
adressieren*

**GÖG-Colloquium
12. Dezember 2018**

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Ludwig Boltzmann Gesellschaft**

LBG

AN OVERVIEW

▶ **LBG – public research organisation**

- € 28.9 million p.a. (30% base budget BMBWF)
- 550 employees
- 19 Ludwig Boltzmann Institutes (LBI) and 2 Research Groups
- 50 (inter)national Partnerships

WHAT DOES LBG STAND FOR?

**EXCELLENT
RESEARCH
OPENNESS
SUSTAINABLE
CAREERS
SOCIAL
IMPACT**



SOCIETAL CHALLENGES

LBG is developing new solutions for complex societal issues by

- identifying and addressing relevant social topics (Crowdsourcing)
- mobilising and involving “unusual” parties (Lead Users)
- developing and implementing excellent research (Ideas Lab)
- supporting transformation into effective solutions

OPEN INNOVATION IN SCIENCE

LBG is a pioneer in the development and application of new formats, collaborative research and of Open Innovation in and for Science

- Open Innovation methods are applied for the formation of new institutes
- New Organisational Designs are being developed
- LBG OIS Center implements OIS methods within Ludwig Boltzmann Institutes

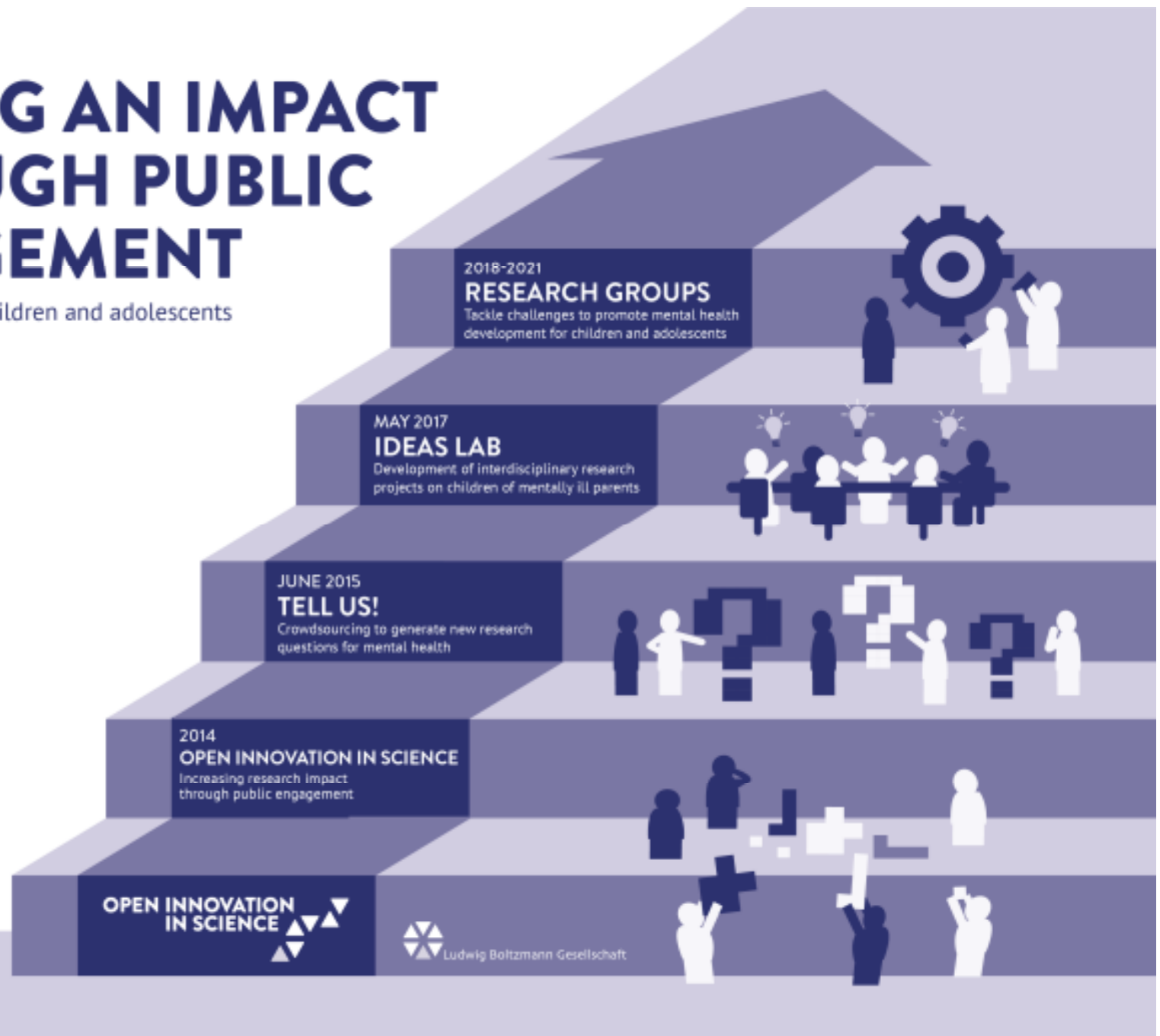
OPEN(ING) CAREERS

LBG places a high value on the development of young scientists in an academic context and beyond.

- Strengthening the cooperation with universities and building a network of partners outside academia
- Development of tailored offerings for young scientists (internships, potential analysis)
- LBG Career Center serves as first point of contact for all career-related questions

MAKING AN IMPACT THROUGH PUBLIC ENGAGEMENT

on mental health of children and adolescents





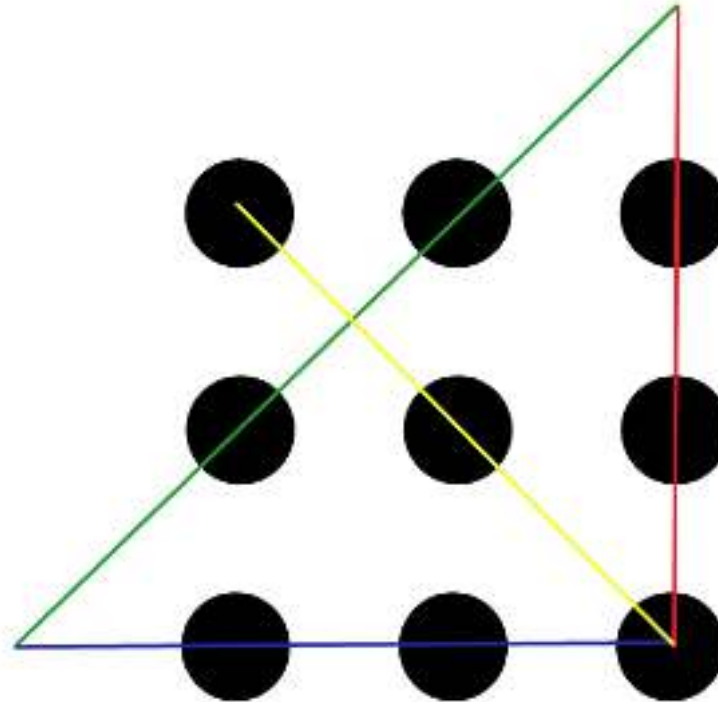
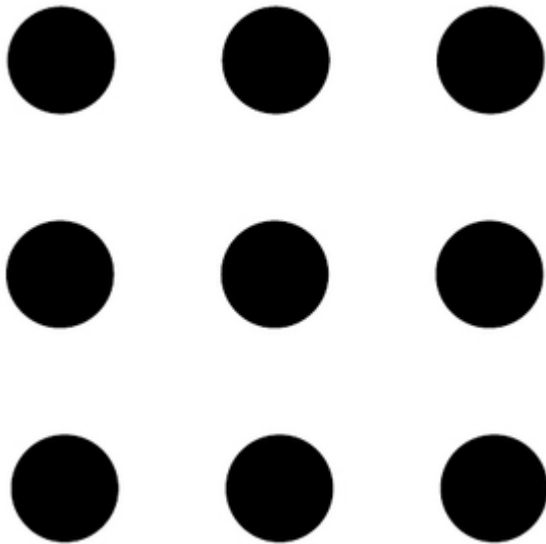
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THINKING OUTSIDE THE BOX



THINK OUTSIDE THE BOX



“Nine dots puzzle”, Sam Lloyd, 1914, *Cyclopedia of Puzzles*
J. P. Guilford



THINK OUTSIDE THE BOX

Problem requires thinking outside the box, but explicit instructions to do so will not help and more important thinking outside the box is meaningless unless the nature of the box that bounds the current thinking is understood

Eliminate the Goal-Directedness of Your Thinking

The minute you introduce a goal in your thinking, you're introducing a constraint.

Intend to encounter, rather than “come up with” ideas

Rather than “coming up with ideas” it's better to think of yourself as just encountering ideas.

Think wide

Keep every realm of thinking on the table.





TELL US!

Co-creating the research topic

TELL US!

WHAT QUESTIONS ABOUT
MENTAL HEALTH DOES
RESEARCH NEED TO ANSWER?


39,54%
Patients


25,52%
Health care prof.


17,20%
Family members


6,05%
Other


4,91%
Psychologists


4,91%
Psychotherapists


2,27%
Psychiatrists


1,13%
General Practitioners


0,19%
Neurologists

 **400 high-quality
contributions**



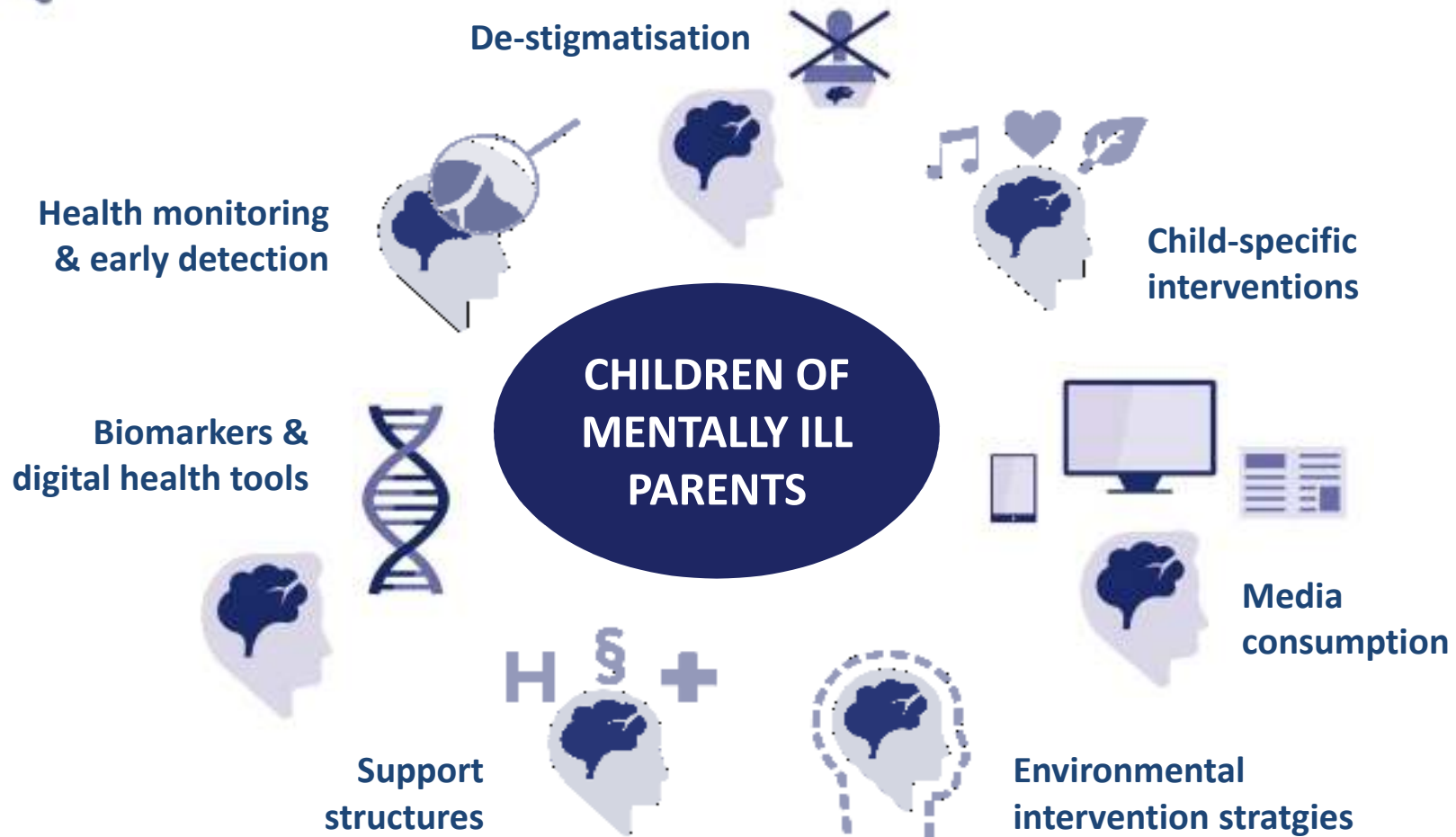
**MENTAL HEALTH
OF CHILDREN AND
ADOLESCENTS**





TELL US!

Community defined research challenges





IDEAS LAB

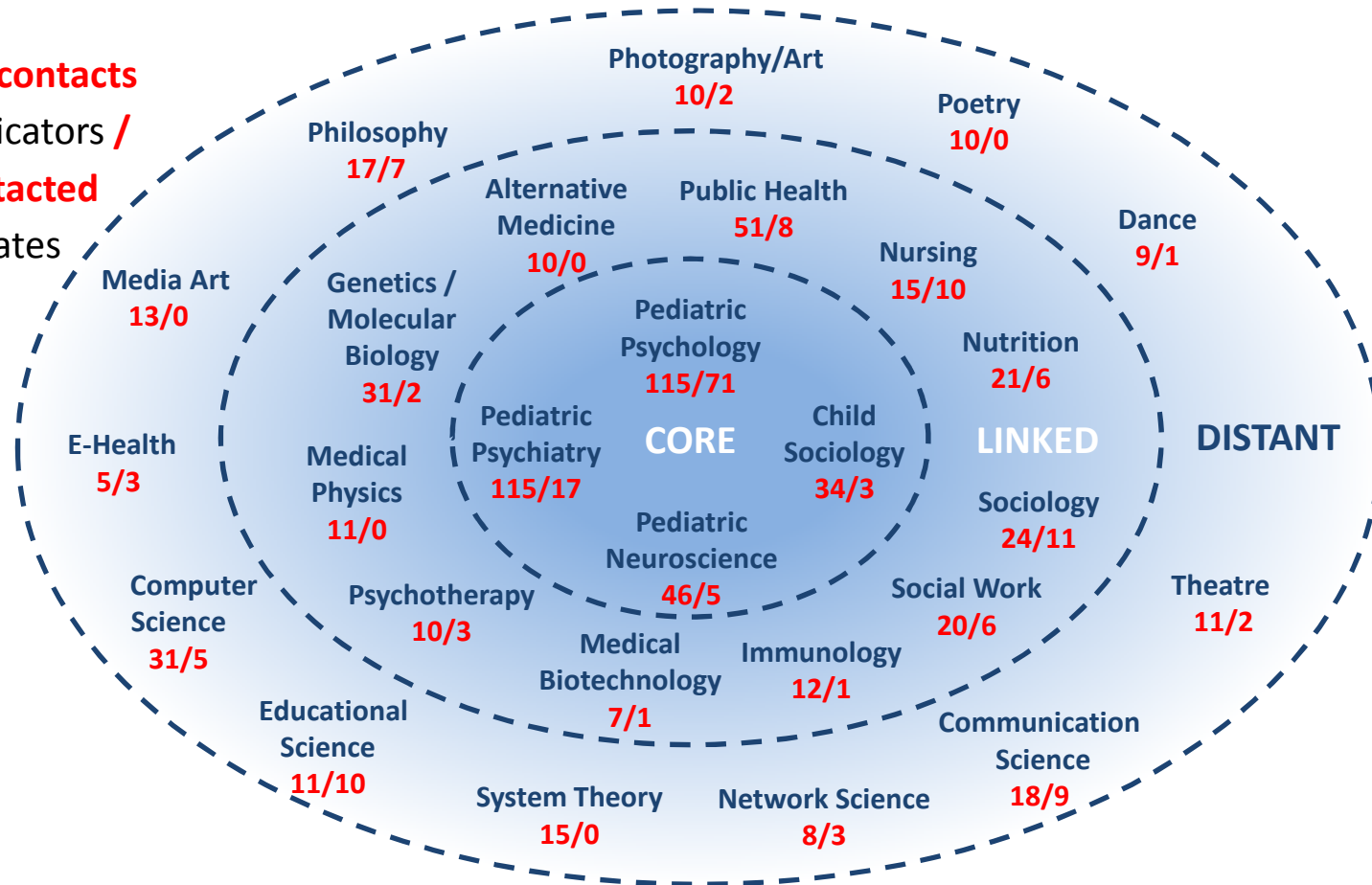
Selecting participants



IDEAS LAB

Directed search for researchers in various disciplines

775 pyramiding contacts
acting as multipliers /
217 directly contacted
potential candidates
= TOTAL 992





IDEAS LAB SELECTION

Assessment criteria operationalised

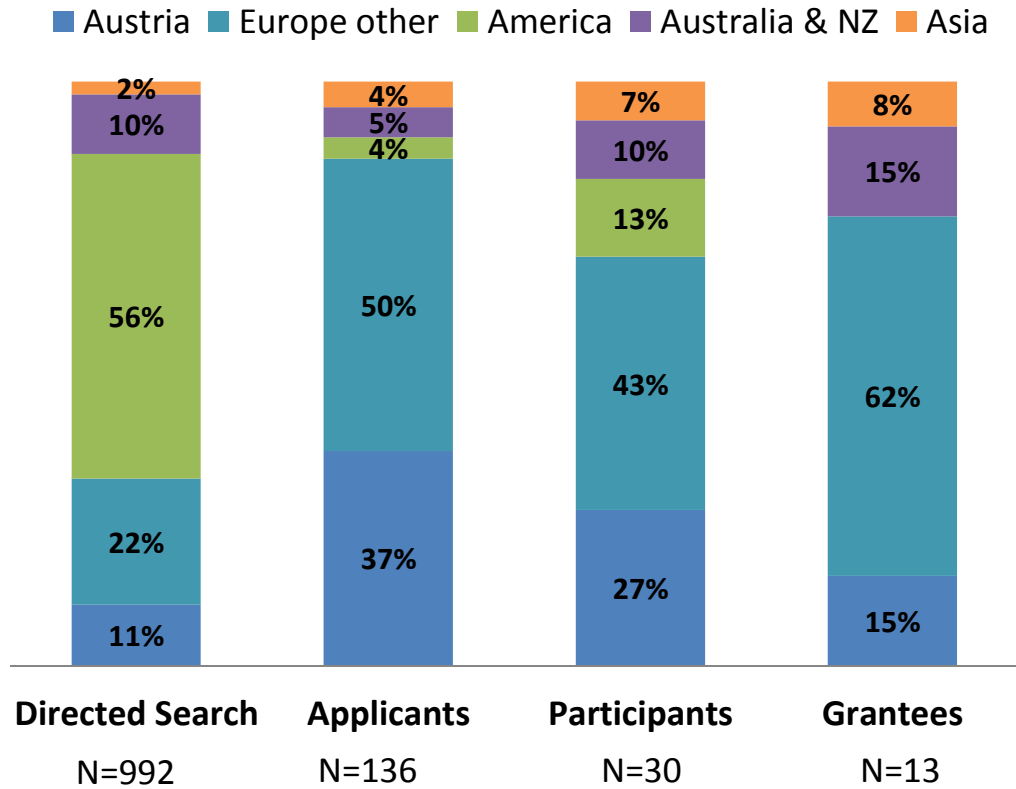
1. Summary of **professional background**
2. How do you see **your expertise and interests contributing** to realising the **goal of the Ideas Lab** on Mental Health for Children and Adolescents?
3. What is your **approach to teamwork**?
4. How would you **explain your area of interest** to individuals with different expertise to your own?
5. How well do you consider yourself **suited for the Ideas Lab**?
6. What do you hope to **gain from participating in this Ideas Lab**, personally and professionally?





IDEAS LAB

Geographic distribution (%)



136 applicants - 28 countries



30 participants - 15 countries



13 grantees - 9 countries



UNITED KINGDOM

Adam Barnard
ARTS
self employed

Annette Bauer
SOCIOLOGY, HEALTH, OTHER
London School of Economics

Anne Grant
HEALTH, OTHER
Queen's University,
Belfast

Kate Woodcock
PSYCHOLOGY, NEURO-
SCIENCES, OTHER
Queen's University,
Belfast

CANADA

Brenda Gladstone
SOCIOLOGY, ARTS
University of Toronto

Joan Hart
SOCIOLOGY, PSYCHOLOGY,
PAEDIATRICS
University of Calgary

USA

Melinda Morrill
PSYCHIATRY, SOCIOLOGY,
PSYCHOLOGY
Massachusetts General
Hospital, Harvard

CHILE

Jorge Gaete
PSYCHIATRY, PSYCHOLOGY,
PAEDIATRICS
King's College London &
University de los Andes

NORWAY

Ingunn Olea Lund
PSYCHOLOGY, HEALTH
Norwegian Institute of
Public Health, Oslo

Bente Weimand
EDUCATIONAL-SCIENCES,
PSYCHIATRY, HEALTH
Akershus University
Hospital, Oslo

PORTUGAL

Joao Dias
COMPUTER-SCIENCES
University of Lisbon

NETHERLANDS

Evin Aktar
PSYCHOLOGY
Leiden University

SWEDEN

Martin Cederlöf
PSYCHIATRY, HEALTH
Karolinska Institute,
Stockholm

ITALY

Esther Judith Schek
PSYCHOLOGY, OTHER
University of Milano-
Bicocca

GERMANY

Hanna Christiansen
PSYCHOLOGY, OTHER
Phillips University Marburg

Christine Heinsch
PSYCHIATRY, PSYCHOLOGY,
NEUROSCIENCES
Friedrich-Alexander University,
Nuremberg

PAKISTAN

Batool Fatima
PSYCHOLOGY, HEALTH
Aga Khan Hospital, Karachi

THAILAND

Sirirat Ulanntinon
PSYCHIATRY, PAEDIATRICS,
OTHER
Queen Sirikit National
Institute of Child Health,
Bangkok

AUSTRALIA

Melinda Goodyear
PSYCHOLOGY, HEALTH,
NEUROSCIENCES
Monash University,
Melbourne

Christine Grove
PSYCHOLOGY, PAEDIATRICS,
COMPUTER-SCIENCES
Monash University,
Melbourne

Jean Paul
SOCIOLOGY, HEALTH, OTHER
Murdoch Children's Research
Institute, Melbourne

COUNTRY

AUSTRIA

Vaidilute Asisi
PSYCHOLOGY, HEALTH,
OTHER
Child Psychology Centre,
Mödling

Laura Brandt
EDUCATIONAL-SCIENCES,
PSYCHOLOGY, HEALTH
University of Vienna

Silvia Exenberger-Vanham
PSYCHOLOGY, OTHER
Medical University
Innsbruck

Monika Geretsegger
PSYCHIATRY,
PSYCHOLOGY, OTHER
Landeskrankenhaus
Hollabrunn

Marija Mitic
PSYCHIATRY, HEALTH,
OTHER
Medical University
of Vienna

Conor Patrick Murphy
PSYCHIATRY, HEALTH,
NEUROSCIENCES
University of Innsbruck

Beate Schrank
PSYCHIATRY, SOCIOLOGY,
PSYCHOLOGY
University Clinic Tulln,
Karl Landsteiner University

Ingrid Zechmeister-Koss
HEALTH
European Centre for Social
Welfare Policy & Research, Vienna

IDEAS LAB PARTICIPANTS

24-28 May 2017

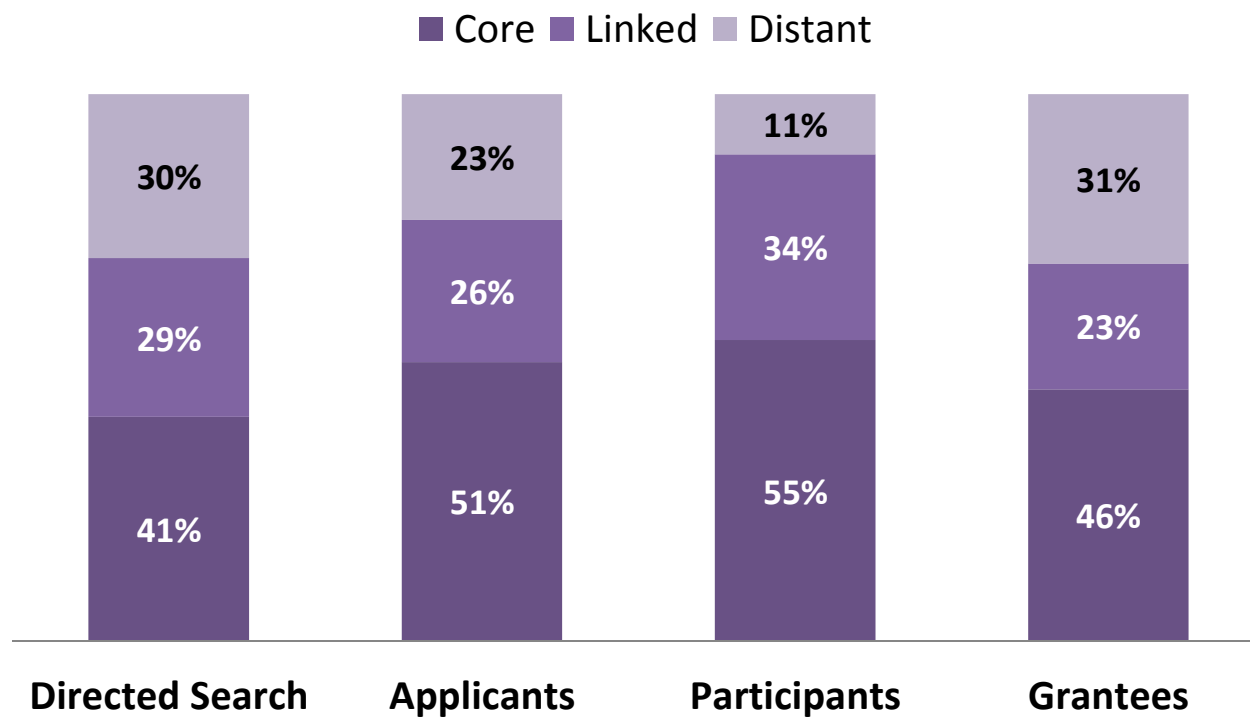




IDEAS LAB

Discipline distribution

992 contacted > 127 applicants > 30 selected participants > 13 grantees





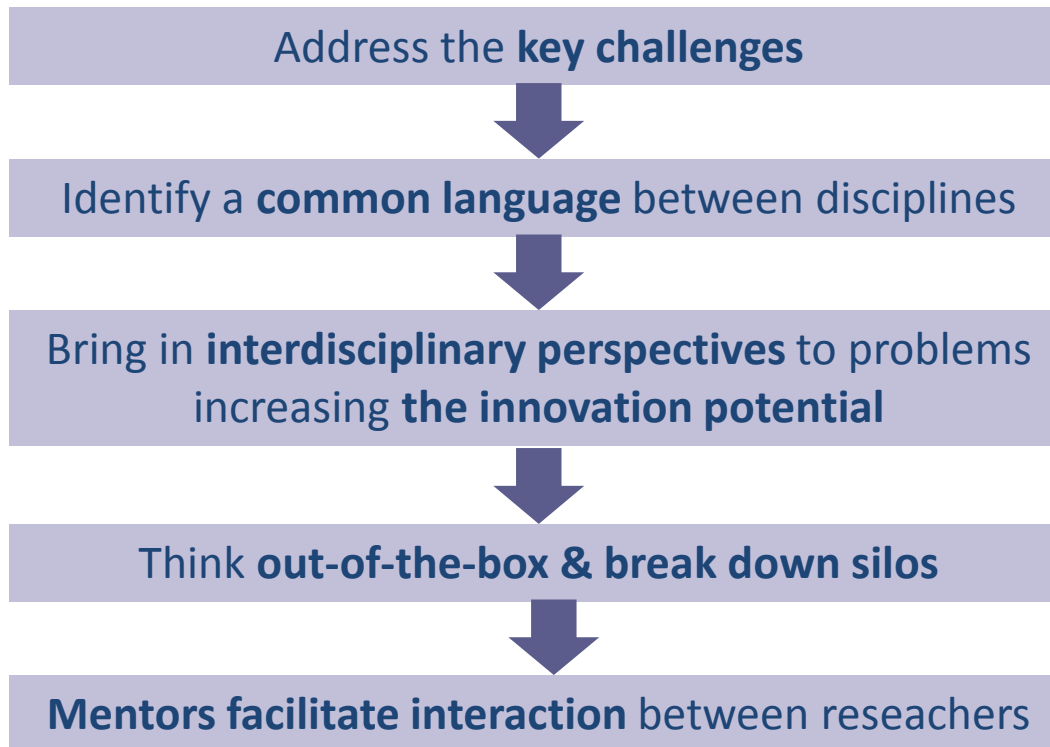
IDEAS LAB event

From Challenges to Research Groups



IDEAS LAB

Free-thinking & interactive workshop





IDEAS LAB

Agenda May 24-28



Day
1

EXPERTISE

Who is who?
Knowledge in the room,
scope of the event,
guest speakers &
actor's presentation

Day
2

EXPLORE CHALLENGES

Generation of ideas
and inspiration,
experts by
experience (patient
perspective)

Day
3

PROJECT IDEAS

Explore three
potential project
options &
preliminary form
teams

Day
4

FORMING TEAMS

Further
development on
project ideas and
reshuffle teams

Day
5

RESEARCH PROJECTS

Finishing
working on
projects &
deliver final
presentations

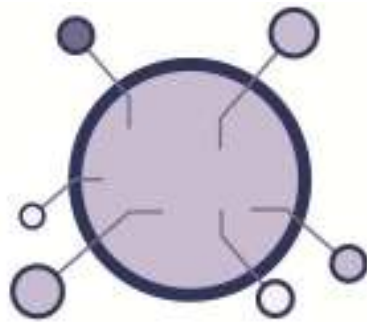




IDEAS LAB

Final assessment

5 Research Groups were **assessed based on five criteria**,
2 Research Groups invited for further concept development:



NOVELTY



INTERDISCIPLINARITY



ENGAGEMENT



FEASIBILITY



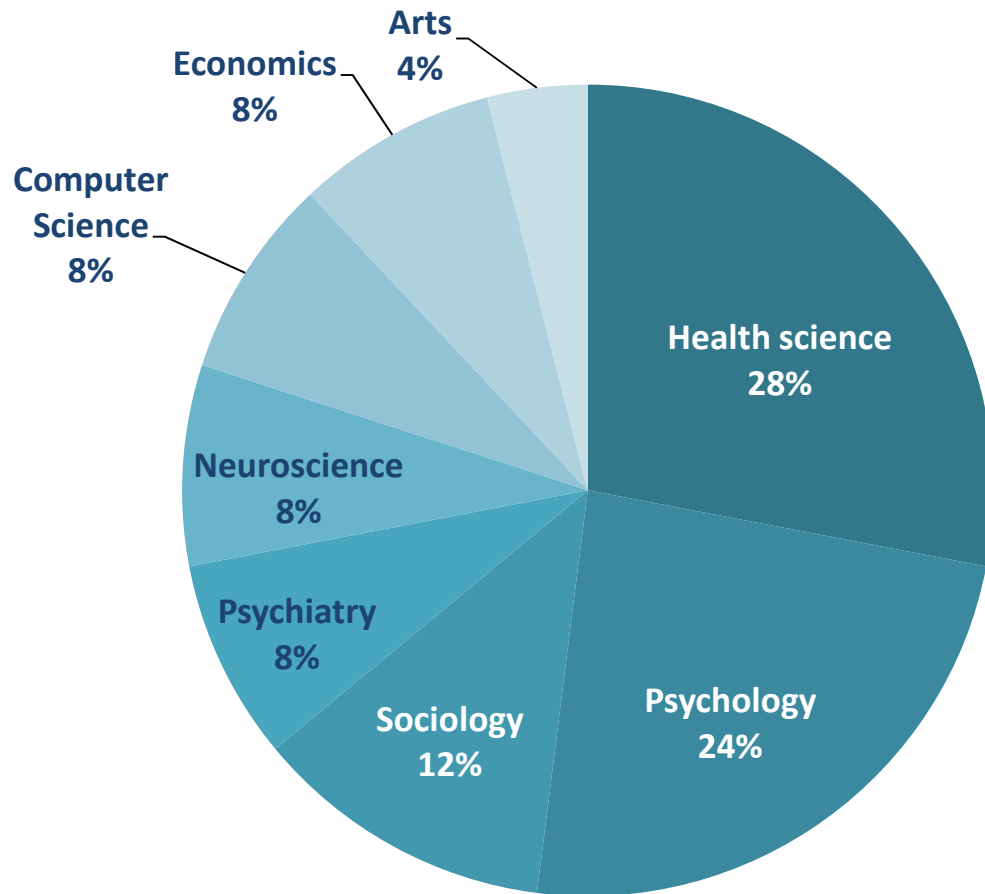
IMPACT





IDEAS LAB

Grantees' disciplines





RESEARCH GROUPS

Implementing novel structures



Advisory Board including Experts by Experience

Youth Competence Group

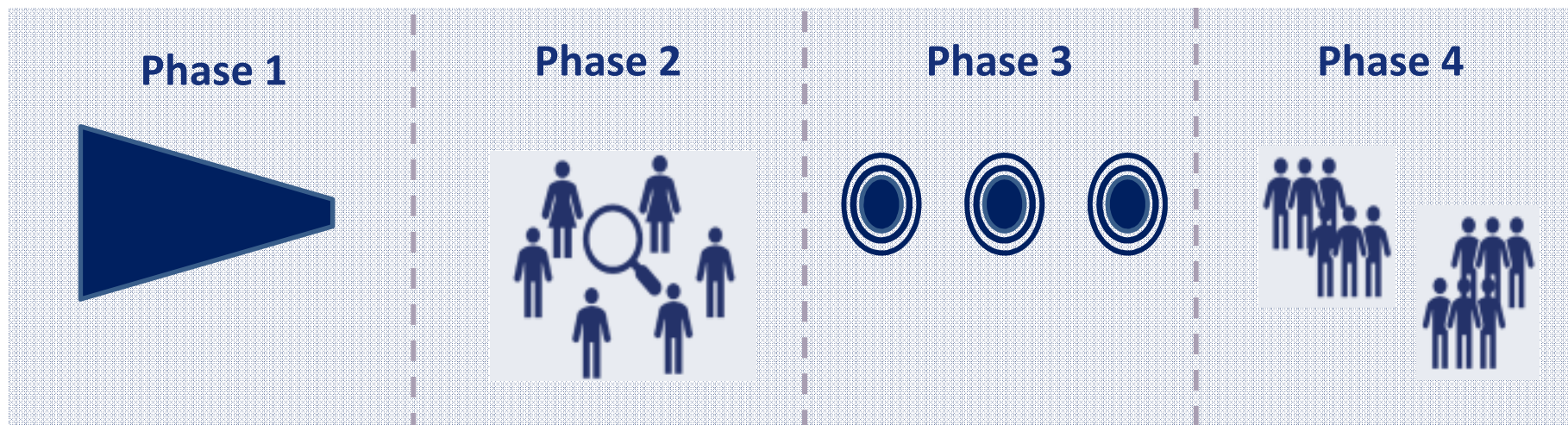
Strong Partner Network – Relationship Manager





Digital Health Meets Societal Needs

Transforming Health Systems into a Patient - Centered World



Expert Crowd Sourcing

Identification of strategically important future topics

Pitch to Partners

Selection of consortia for hosting new LBI in Digital Health

Lead Expert Workshop

Development of concrete questions for research

Ideas Lab

Forming research teams

Process in Phase 1

Statistics of Data Collection

The aim of the jury meeting is to finalize phase 1 by evaluating the 5 health topics, identified during this first phase. On this page the method of phase 1 will be explained. The overarching question for the data collection of this phase was: "Which health topics and problems (also care and system related) have already gained and will gain importance for society within the next 10 years and have potential for a major impact of digital technologies?"



SPECIFICATIONS FOR THE FINAL HEALTH TOPICS (RESULTS OF PHASE 1) IN CONTEXT OF DIGITALIZATION:

- A major impact of digital technologies in the topic is plausible
- High and increasing future societal relevance/need
- Area of research that was not largely supported earlier

OVERVIEW OF THE FOUR-STEP PROCESS:



IN THE 2. STEP "DATA COLLECTION" TWO SEARCH METHODS WERE APPLIED SIMULTANEOUSLY:

	Pyramiding Search	Content Analysis
 Method	Using references from interviewees to identify the target person at the "top of the pyramid"	Thoroughly browsing and analyzing content (e.g. social media, journals, blogs, studies, fora, ...)
 Aim	• Finding relevant interview partners	• Finding starting points • Gaining knowledge about user needs • Finding relevant interview partners
 Result	• Personal recommendations by both users and experts led to new interview partners within the defined set of criteria and successful interviews	• Start-ups (founded on user needs) indicated/confirmed need areas • Research studies and blogs highlighted current trends and provided starting points for interview partners



190 people contacted
(Austria and International)

46 user and user-organization interviews
(patient-near unusual suspects in and outside of healthcare and user organizations)

16 expert interviews
(general and digital health experts)

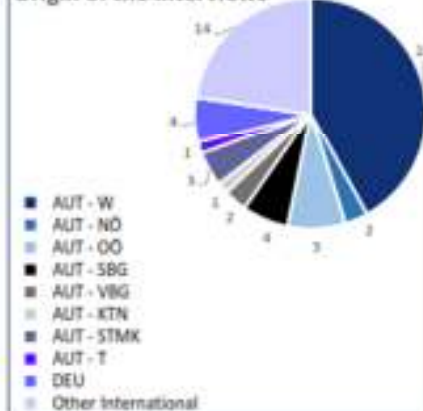


62 in-depth semi-structured interviews conducted



42 relevant secondary sources analyzed
(articles, presentations, blogs, fora, start-ups, Facebook groups)

Origin of the interviews



Sampling





Ludwig Boltzmann Institute
**Increasing Patient Participation during
Diagnosis, Acute and Life-Long Therapy**
University Hospital Salzburg

Ludwig Boltzmann Institute
**Securing and Enhancing the Quality of
Health Services and Patient Safety**
Medical University of Vienna



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