#### Faculty's structure and academic departments

As part of the Faculty of Behavioural and Movement Sciences (FBMS), our psychology research encompasses 100+ FTEs spread over three departments: biological psychology (BIOP), experimental & applied psychology (EAP), and clinical, neuro- & developmental psychology (CNDP). Together we seek to generate scientific insights in mental and physical behaviour to contribute to a healthy, active, and meaningful life for everyone at any stage of life. We capitalise on our unique resources and state-of-the-art expertise and facilitate high-quality, interdisciplinary education and research in close relations to current societal needs.

### Mission and strategic aims

We wish to inspire research with scientific impact and consolidate translational research with societal impact. Our focus is on areas that show solid scientific progress, that are highly competitive, and that are technically and intellectually challenging.

We preserve and enhance research quality through:

- 1. Inspiring research with high scientific impact via top quality research and alliances;
- Upholding research integrity and encourage open science by considering integrity as part of our academic culture and provide for a good support infrastructure on research data management and open science.

## We promote societal relevance through:

 Consolidating translational research with societal impact through synergies, strategic alliances, and partners and, by encouraging both dissemination outside academia and business development

# and guarantee viability through:

- 4. Attracting and nurturing talent across every stage in their career. We take good care of our PhD-candidates via our *Graduate school*. We stay true to our guiding principles of quality, diversity, openness, and (social) safety and we recognise and reward both individual and team science;
- 5. Employing various strategies to keep *research* funding sustainable and maintain our success level in acquisition and funding.

## **Accomplishments on research quality**

About 5.2 peer-reviewed articles were published per research full-time FTE with a median 1.17 field-weighted citation index. Some 84% of our publications entered top-tier journals. Members of the psychology departments collectively received 47 (inter-)national prizes, award and other tokens of recognition and many researchers hold leading positions in (inter-)national organisations influencing scientific and societal developments.

#### Accomplishments on societal relevance

We contributed to (inter)national policy making and our scientific advances entered various policy documents. The departments' figureheads brought scientific news to the laymen via prime-time national television, popular books, theatre shows etc. Several research activities led to fruitful business development, such as the <u>VU Ambulatory Monitory System</u> (VU-AMS) or the <u>HEXACO</u> personality assessment battery. The latter has been successfully marketed to recruitment companies. Digital tools were developed to enhance mental health such as <u>Moodbuster</u>, <u>Caring Universities</u> and <u>Oncokompas | Steun bij het leven met kanker</u> (see factsheet).

## Research integrity and open science

Since 2020 we implemented five complementary measures to optimize research support, and guidance and awareness on research integrity: (1) coordination of research integrity issues; (2) installation of PhD-candidate advisors; (3) installation of department Research & Policy Support (REPS) as hub for RDM, privacy and open science; (4) alignment of data infrastructure with VU-central; (5) improved communication. The faculty offers an annual Open Science Award, and it has become standard practice to pre-register and make data publicly available through, e.g., OSF and GitHub (see the factsheet for selected examples).

## Viability

Our departments have proven strong in acquiring prestigious individual grants and large consortium grants (Figure 2). An interdisciplinary research team received a prestigious KNAW AMMODO Award for SENSA; funding from EU Horizon 2020 and Horizon Mental Health was acquired with RESPOND and STRENGTHS. Our researchers participated in three consortia that received NWO gravitation grants: GUTS, Stress in Action and, the Amsterdam Cooperation LAB (ACL) is part of the Hybrid Intelligence Research Consortium. 'Werklandschap van de Toekomst' received funding from the National Growth Fund and these examples showcase only a fraction of our successes.

### **Future focus**

The substantial money injections via the <u>SSH sector plan 2022</u> and the <u>starters and stimulation grants</u> led to new strategic highlights, like creating tenured positions and building up our young talents' academic career at FBMS. We seek for a balanced approach between intrinsic motivation and extrinsic reinforcement mechanisms, e.g., by encouraging alternative career routes through which we can provide society with increasing access to academic capital. Overall, we aim to increase the translational value of the knowledge our research generates and foster grassroots multidisciplinary initiatives that break ground.

## **FACTSHEET**

## **Biological Psychology (BIOP)**

targets genetic and environmental factors that cause individual differences in mental and physical health, brand structure and function and normal and abnormal behaviour.

### **Experimental & Applied Psychology (EAP)**

strives towards excellent and inspiring research in the fields of social, cognitive, and organisational psychology. It promotes the fundamental understanding of human cognitive and social mechanism.

# Clinical-, Neuro- & Developmental Psychology (CNDP)

aims to conduct excellent research in clinical psychology, from understanding mechanisms of psychopathology to prevention and treatment.



Figure 2: funding sources

Example	M€
ERC, MSCA	12.5
H2020/Europe	9.5
Veni, Vidi, Vici	4.6
Roadmap Gravitation	16.7
NIH, Jacobs	4.2
RVO, KNAW	6.1
	ERC, MSCA H2020/Europe Veni, Vidi, Vici Roadmap Gravitation NIH, Jacobs

### Alliances

- Amsterdam Leadership Lab (A-LAB)
- Amsterdam Public Health (APH)
- Avera Health
- <u>Institute of Brain and Behaviour</u> (iBBA)
- <u>Netherlands Autism Register</u> (NAR)
- <u>Netherlands Twin Register</u> (NTR)
- Spinoza Centre for Neuroimaging

# Open data

- ACTION data protocols
- FAIR Data Cube multi-omics data analysi
- Cooperation Databank (CoDA
- Meta-analytic databases (METAPSY
- ENIGMA

## **CASESTUDIES**

### The Netherlands Twin Register (NTR)

NTR is a nationally and internationally renowned institution in both social and biomedical sciences. It focuses on explaining individual differences in behaviour, health, and well-being, in particular the interplay between nature and nurture. It combines longitudinal twin and family research with multi-omics approaches and innovations in methodology for the analysis of (longitudinal), complex, high-dimensional ('big') data. The high scientific value of NTR, which currently includes data from 60,000 twin pairs and more than 100,000 of their relatives, is reflected in the quantity and particularly high scientific output. Since 1992 almost 1,500 peer-reviewed SCI-publications appeared (including 14 in Nature, 7 in Science, and 127 in 'sub' Nature journals (e.g., Nature Genetics 70; Nature Communications 27; Nature Neuroscience 9). NTR contributes to a substantial degree to the VU rankings in, among others, the Shanghai index. The international appeal of NTR is also illustrated by the fact that Barack Obama, upon taking office, provided two Grant Opportunity grants with a combined size of over M\$10 for genotyping, RNA expression, and creation of cell lines for NTR participants, through the NIMH.

# Social & Educational Neuroscience Amsterdam (SENSA)

A key challenge for social educational neuroscience is to capture the dynamics of social behaviour in a developmentally appropriate and ecologically valid way, while at the same time keeping the experimental rigour that is needed to make reliable inferences about the underlying behavioural and brain mechanisms. The interdisciplinary nature of our research team makes us well positioned to tackle this challenge. We developed 'social mindfulness', a new behavioural paradigm to assess a subtle form of prosocial behaviour, which can be adapted to capture cooperation in educational settings. Longitudinal assessments allow for tracking the development of social mindfulness and link it with classroom network position and educational and social outcomes, whereas neuroimaging provides insight into mechanisms of social processes of hostility and friendliness that emerge between individuals with divergent opinions, e.g., in the context of ethnically diverse classrooms. The team is leading in portable neuroimaging research with which we can study brain dynamics of social interaction and motivational processes in real-life settings.

### The Netherlands Autism Register (NAR)

The Netherlands Autism Register (NAR) has been founded in cocreation with autistic individuals. The major aim of the research is understanding differences between autistic and non-autistic individuals across the life span seeking to improve support for people with autism. We focus on life course development by following a large group of autistic children and adults, along the following themes: (i) Diversity in development. Autism is strongly heritable but highly heterogenous. To unravel the diversity of underlying mechanisms, we link genetic and environmental risk and protective factors to life-course development; (ii) Assessment. The diagnostic assessment of autism is largely based on subjective interpretations. To provide more objective tools for measuring different phenotypic aspects of autism, cognitive and social interactive tests will be investigated; (iii) Treatment. Autistic features may hamper traditional interventions. Internet-based or blended interventions can provide highly innovative, suitable, and cost-effective solutions to this problem. our research program has been acknowledged as a seminal example of participatory research. We provide unique individual feedback reports for our participants, which are appreciated and increased the engagement with our cohort.