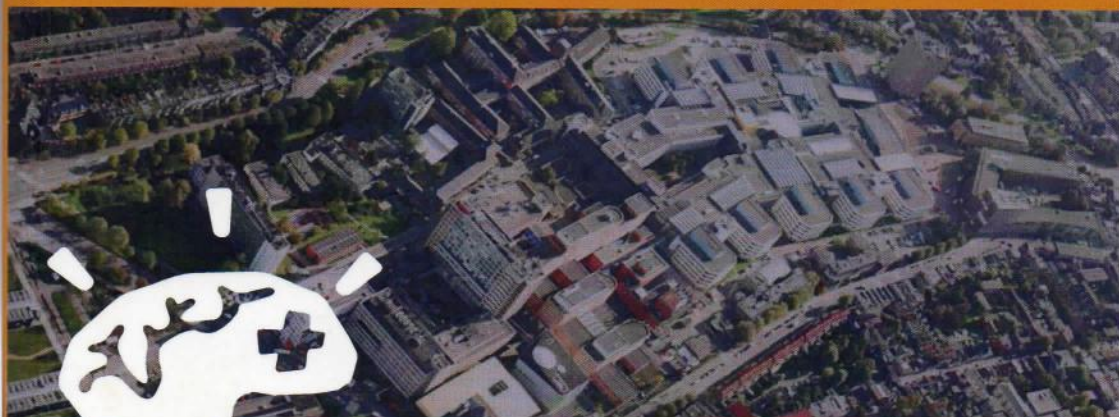


BOOK OF ABSTRACTS

22nd INTERNATIONAL STUDENT
CONGRESS OF (BIO)MEDICAL SCIENCES



ISCOMS

INTERNATIONAL STUDENT CONGRESS OF
(BIO)MEDICAL SCIENCES

SCIENCE BEYOND BORDERS

PROGRAMME

Tuesday the 2nd of June - Pre-course

08.00–08.30 Registration
08.30–08.45 Coffee and tea break
08.45–09.00 Day opening
09.00–10.30 Course 1
10.30–11.00 Break
11.00–11.30 Your Future at the UMCG
11.30–12.30 Speed keynote lectures
12.30–13.30 Lunch
13.30–15.00 Science Elective
15.00–16.30 Course 2
16.30–17.00 Break
17.00–18.30 Course 3
18.45–19.15 UMCG-tour
19.30– ... Social programme

Wednesday the 3rd of June - Congress day 1

08.00–08.30 Registration
08.30–09.15 Opening ceremony
09.15–10.15 Keynote lecture I: Chad E. Bouton
10.15–11.20 Poster session I
11.20–11.45 Break
11.45–13.00 Workshops I
11.45–14.00 Networking lunch (optional)
13.00–14.00 Lunch
14.00–14.50 Plenary session I
14.50–16.15 Oral session I
16.15–16.50 Break
16.50–17.40 Plenary session II
17.40–18.40 Keynote lecture II: Prof. Carl Figdor PhD
18.45–19.00 Closing ceremony
19.15– ... Formal dinner at the Academy Building

Thursday the 4th of June - Congress day 2

08.00–08.30 Registration
08.30–08.40 Day opening
08.40–09.55 Live surgical operation
09.55–10.55 Keynote lecture III: Nicola Petrosillo MD PhD
10.55–11.15 Break
11.15–12.30 Workshops II
12.30–13.30 Lunch
13.30–14.55 Oral session II
14.55–16.00 Poster session II
16.00–16.45 Break
16.45–17.45 Keynote lecture IV: Prof. Martin Chalfie PhD
17.45–18.30 Award & closing ceremony
19.00–22.00 Buffet at Huize Maas
22.00–... Worldwide ISCOMS Night

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Executive Board

In June 2014, the new Executive Board of the International Student Congress of (bio)Medical Sciences was formed. We started as nine individuals, but became close friends in no time. Last year, we encountered a lot of problems and stress, but by working as a team we have overcome every situation. We loved every moment of the last year and with our shared enthusiasm and dedication we are striving to make the 22nd edition of ISCOMS a tremendous success once again.

The year round we discussed and brainstormed about possibilities for the upcoming congress and evaluated the progress thoroughly. It was a year full of innovative ideas, ambition, and laughter. Day in and day out we collaborated intensively which in our opinion resulted in a great venue for student research exchange as well as the opportunities to improve your research and to broaden your social scientific network.

We are honoured and privileged to welcome you to the 22nd International Student Congress of (bio)Medical Sciences.



Henk Schoemaker, Piter Huisma, Arianne van de Loosdrecht, Annelou Ubels, Joost Beusekamp, Valérie Franx, *Ruud Bos*, Willemijn van Rijt, *Paul de Vos*, Marije Zwakman & Arlette Kuik



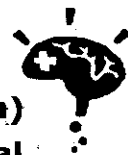
The advisory board has been important for the organisation of the International Student Congress of (bio)Medical Sciences for many years. Since the first congress, 21 years ago, the scientific, financial, and organisational aspects of the congress have all been done by students. Judging from years of experience, the organisation can compete with many international scientific meetings in terms of quality and management. The advisory board has a big share in making this possible.

The advisory board consists of two seniors from the University Medical Center of Groningen (UMCG). After years of working in the UMCG, they have a lot of experience with doing research and a lot of useful contacts within the hospital. Because of their scientific background, they can assist in the continuity of the congress, as each year's congress is organised by a new team of students.

We mainly advise, guide, and support all activities of the ISCOMS organisation and its mission. These are our formal tasks. Besides, we enjoy all the fun in the process of the organisation by a young ambitious group of students. We hope that the upcoming days will deliver the same amount of fun and motivation to you as we experienced as being part of the organisation.



Prof. Ruud R.M. Bos DMD PhD & Prof. Paul de Vos PhD



Utilization of grinting grass (*Cynodon dactylon*) weeds in Indonesia as an antidiabetic botanical medicine

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Introduction

Diabetes mellitus is a chronic, incurable condition that effect 13.7 million people in Indonesia. Research by Riskesdas in 2007 showed that the proportion of the cause of death in group age 45-54 due to diabetes in urban areas rank-2 is 14.7%. One of the Indonesia antidiabetic botanical medicine are Grinting grass (*Cynodon dactylon*). Grinting grass traditionally used to medicated diabetes but the are not many research that investgate the antidiabetic activity of thus grass. The aim of this study is to investigate the antidiabetic activity of the non-polisacharide fraction of Grinting grass (NPF-GG) in streptozotocin induced diabetic mice.

Material & methods

25 male BALB-C mice of two months old were used in this study. Streptozotocin multiple low doses were intraperitoneally administered 40mg/kgBW each day for five days. The mice were divided into five groups: (1) negative control group (K0), treated by solven tween80 and aquades, (2) positive control group (K1), treated by metformin as a standard drug, (3) treated by NPF-GG 250 mg/kgBW (P1), (4) treated by NPF-GG 500 mg/kgBW (P2), and (5) treated by NPF-GG 1000 mg/kgBW (P3). The treatment was conduct for 14 days. Hypoglycemic effect of NPF-GG was determined at 6 and 14 days post treatment. At the end of experiment, all of mice were eutanized and the pancreas was collect by abdominal section for analysis of quantity cells in Langerhans pancreatic islet

Results

The result of this study showed that NPF-GG 250 mg/kgBW was identified as the most effective dose. It lower blood glucose level around 47.1% after 5h of administration. It was more effective than metformin that lower blood glucose level around 59%. from Langerhans pancreatic islet showed that the cell quantity increase at $2133,40 \pm 668,64$ cells for NPF-GG 250 mg/kgBB, more effective than menformin with $671,20 \pm 206,10$ cells and negative control group with $776,20 \pm 175,17$ cells.

Conclusion

These result indicated that non-polisacharide fraction of Grinting grass has high antidiabetic potential along with hypoglycemic effect and increasing cell quantity of Langerhans pancreatic islet. Comparatively NPF-GG was found to be more effective than metformin as a standart antidiabetic drug.