



China Scholarship Council – University Maastricht

PhD Programme Application form

Basic information

1. Information on prospective UM supervisors and Promotor

1a. First Supervisor/promoter:

- Title(s), initial(s), first name, surname: Dr. L.W.J. (Laura) Baijens
- Research group: Dysphagia Research Lab - Department of Otorhinolaryngology, Head and Neck Surgery and *GROW*-School for Oncology and Reproduction
- Address for correspondence: P. Debyelaan 25, Postbus 5800, 6202 AZ, Maastricht, The Netherlands
- Telephone: +31433877585
- E-mail: laura.baijens@mumc.nl

1b. Second Supervisor/copromoter:

- Title(s), initial(s), first name, surname: Dr. W. (Walmari) Pilz
- Research group: Dysphagia Research Lab - Department of Otorhinolaryngology, Head and Neck Surgery and *GROW*-School for Oncology and Reproduction
- Address for correspondence: P. Debyelaan 25, Postbus 5800, 6202 AZ, Maastricht, The Netherlands
- Telephone: +31433871169
- E-mail: w.pilz@mumc.nl

1c. Promotor (if applicable): – see above

- Title(s), initial(s), first name, surname: Prof. dr. B. (Bernd) Kremer
- Research group: Department of Otorhinolaryngology, Head and Neck Surgery and *GROW*-School for Oncology and Reproduction
- Address for correspondence: P. Debyelaan 25, Postbus 5800, 6202 AZ, Maastricht, The Netherlands
- Telephone: +31433872604
- E-mail: bernd.kremer@mumc.nl

2. Information on UM Faculty/ Department/ Institute/ School contact person:

When the application is granted by both the CSC and UM, the contact person is responsible for the practical arrangements (i.e. assistance in obtaining a visa, finding accommodation, etc.) of the visit of the PhD candidate:

- Initial(s), first name, surname: Secretariat GROW
- Research group: Dysphagia Research Lab

In this link you can find information on the work of the Interdisciplinary Dysphagia Team of the Comprehensive Cancer Center Maastricht UMC+:
<https://oncologie.mumc.nl/de-diagnostiek-en-behandeling-van-slikstoornissen-bij-hoofd-halskanker-patienten-verbeteren-door>

- Address for correspondence: P.O. Box 616, 6200 MD Maastricht, The Netherlands
- Telephone: T +31 (0)43 388 18 63
- E-mail: secretariaat-grow@maastrichtuniversity.nl

4. Research field(s)

Clinical Research

4. Title of research plan for CSC-UM PhD Programme

Visuoperceptual variables to measure oropharyngeal dysphagia in total laryngectomy patients

5. Short summary of research plan (max. 250 words) (A full plan has to be submitted later)

Background: Total laryngectomy (TLE) is a surgical procedure to treat advanced stage laryngeal and hypopharyngeal cancer. Changes in swallowing function are inherent to this procedure and oropharyngeal dysphagia (OD) has an important impact on health-related quality of life. Frequently used imaging tools to evaluate swallowing function are videofluoroscopic swallowing study (VFSS) and fiberoptic endoscopic evaluation of swallowing (FEES). Although OD is a high-prevalent symptom, there is a lack of reliable measurements to evaluate swallowing function of TLE patients using VFSS or FEES. However, the selection of an effective treatment depends among others on the nature and severity of OD.

Study objective: Development and validation of visuoperceptual variables to measure swallowing function in TLE patients using VFSS.

Setting and Methods: TLE-specific visuoperceptual variables will be developed using a database with standardized VFSS recordings of TLE patients who visited the outpatient clinic of OD in the MUMC+. Also, patient demographic, tumor staging, and oncological treatment data are available in this database to ensure external and internal validity of the study. The feasibility and methodological aspects of these variables such as reproducibility in terms of observer agreement,

validity, etc. will be determined using the COSMIN framework (COSMIN.nl) in collaboration with a biostatistician.

Expected Results: This innovative study on development and validation of TLE-specific measurements for swallowing in VFSS immediately leads to a more accurate evaluation of OD in TLE patients in daily clinical practice and a better understanding of the swallowing pathophysiology in this population.

Requirements: The candidate should be motivated, present strong organizational, and time management skills, and be fluent in English (scientific writing and oral presentation).

Group's performance: Publications: ; H-Index: ; number of citations .
Dr. Laura WJ Baijens: H-index: 24; 71 publications; 1,674 citations
Prof. Dr. Bernd Kremer : H-index: 32; 172 publications; 3,266 citations
Dr. Walmaril Pilz: H-index: 13; 28 publications; 431 citations

Selected publications:

1. Krebbers I, Pilz W, Vanbelle S, Verdonschot RJCG, Baijens LWJ. Affective Symptoms and Oropharyngeal Dysphagia in Head-and-Neck Cancer Patients: A Systematic Review. *Dysphagia*. 2022 Jul 7. (IF :2.73)
2. Willemsen ACH, Kok A, Baijens LWJ, de Boer JP, de Bree R, Devriese LA, Driessen CML, van Herpen CML, Hoebbers FJP, Kaanders JHAM, Karsten RT, van Kuijk SMJ, Lalisang RI, Navran A, Pereboom SR, Schols AMWJ, Terhaard CHJ, Hoeben A. Development and external validation of a prediction model for tube feeding dependency for at least four weeks during chemoradiotherapy for head and neck cancer. *Clin Nutr*. 2022 Jan;41(1):177-185.(IF :7.64)
3. Simon SR, Pilz W, Hoebbers FJP, Leeters IPM, Schols AMWJ, Willemsen ACH, Winkens B, Baijens LWJ. Malnutrition screening in head and neck cancer patients with oropharyngeal dysphagia. *Clin Nutr ESPEN*. 2021 Aug;44:348-355. (This journal will receive its first journal impact factor in 2023)
4. Baijens LWJ, Walshe M, Aaltonen LM, Arens C, Cordier R, Cras P, Crevier-Buchman L, Curtis C, Golusinski W, Govender R, Eriksen JG, Hansen K, Heathcote K, Hess MM, Hosal S, Klusmann JP, Leemans CR, MacCarthy D, Manduchi B, Marie JP, Nouraei R, Parkes C, Pflug C, Pilz W, Regan J, Rommel N, Schindler A, Schols AMWJ, Speyer R, Succo G, Wessel I, Willemsen ACH, Yilmaz T, Clavé P. European white paper: oropharyngeal dysphagia in head and neck cancer. *Eur Arch Otorhinolaryngol*. 2021 Feb;278(2):577-616. (IF:3.23)
5. Krebbers I, Simon SR, Pilz W, Kremer B, Winkens B, Baijens LWJ. Patients with Head-and-Neck Cancer: Dysphagia and Affective Symptoms. *Folia Phoniatr Logop*. 2021;73(4):308-315. (IF:2.73)
6. Florie M, Pilz W, Kremer B, Verhees F, Waltman G, Winkens B, Winter N, Baijens L. EAT-10 Scores and Fiberoptic Endoscopic Evaluation of Swallowing in Head and Neck Cancer Patients. *Laryngoscope*. 2021 Jan;131(1):E45-E51.(IF :2.97)

7. Kemps GJF, Krebbers I, Pilz W, Vanbelle S, Baijens LWJ. Affective symptoms and swallow-specific quality of life in total laryngectomy patients. *Head Neck*. 2020 Nov;42(11):3179-3187. (IF :3.82)
8. Willemsen ACH, Kok A, van Kuijk SMJ, Baijens LWJ, de Bree R, Devriese LA, Hoebers FJP, Lalisang RI, Schols AMWJ, Terhaard CHJ, Hoeben A. Prediction model for tube feeding dependency during chemoradiotherapy for at least four weeks in head and neck cancer patients: A tool for prophylactic gastrostomy decision making. *Clin Nutr*. 2020 Aug;39(8):2600-2608.
9. Simon SR, Florie M, Pilz W, Winkens B, Winter N, Kremer B, Baijens LWJ. Association Between Pharyngeal Pooling and Aspiration Using Fiberoptic Endoscopic Evaluation of Swallowing in Head and Neck Cancer Patients with Dysphagia. *Dysphagia*. 2020 Feb;35(1):42-51. (IF :2.73)
10. Terlingen LT, Pilz W, Kuijjer M, Kremer B, Baijens LW. Diagnosis and treatment of oropharyngeal dysphagia after total laryngectomy with or without pharyngoesophageal reconstruction: Systematic review. *Head Neck*. 2018 Dec;40(12):2733-2748. (IF:3.81)
11. Florie M, Baijens L, Kremer B, Kross K, Lacko M, Verhees F, Winkens B. Relationship between swallow-specific quality of life and fiber-optic endoscopic evaluation of swallowing findings in patients with head and neck cancer. *Head Neck*. 2016 Apr;38 Suppl 1:E1848-56. (IF: 3.81)
12. Pilz W, Vanbelle S, Kremer B, van Hooren MR, van Becelaere T, Roodenburg N, Baijens LW. Observers' Agreement on Measurements in Fiberoptic Endoscopic Evaluation of Swallowing. *Dysphagia*. 2016 Apr;31(2):180-7. (IF: 2.73)