

Arthur Matthys, MD. MSc.

Neuroglial Interactions in Cerebral Physiology and Pathologies

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Education

Medicine

- 2022 **Doctor of Medicine**, Sorbonne University
Prevalence and characteristics of demyelinating polyradiculoneuropathies associated with Brentuximab Vedotin. A retrospective cohort study.
Under the supervision of Thierry Gendre
- 2019 – Present **Resident in Neurology**, Sorbonne University
Assistance Publique – Hôpitaux de Paris
University certifications in Neurology – Internal Medicine (2021)
and Clinical Neurophysiology (2022)
National ranking exam for admission in 1st year: 17th/9000
- 2012 – 2019 **Medical School**, Université Toulouse III Paul Sabatier
Local ranking exam for admission in 1st year: 1st/900

Sciences

- 2022 – Present **PhD Student in Neurosciences**, Paris Sciences & Lettres University
École Doctorale Cerveau, cognition, comportement (ED3C)
Centre interdisciplinaire de Recherche en Biologie du Collège de France
Targeting astrocytes to promote brain plasticity in adults
Under the supervision of Nathalie Rouach
- 2015 – 2016 **MSc. in Neurosciences**, Interdisciplinary Master in Life Sciences (IMaLiS)
École Normale Supérieure / Université Pierre et Marie Curie
Graduation with highest honours
- 2014 **MD-PhD Programme**, École de l'INSERM Liliane Bettencourt
National ranking exam: 1st/52

Clinical experience

- Summer 2022 Neuroradiology, Charité University Hospital, Berlin (3 months)
- Winter 2022 Neurointensive Care Unit, Pitié Salpêtrière University Hospital, Paris
- Summer 2021 Neurophysiology and Neurology Unit, Foch Hospital, Suresnes
- Winter 2021 Neurology Unit, Saint-Antoine University Hospital, Paris
- Summer 2020 Intensive Care Unit, Delafontaine Hospital, Saint-Denis
- Winter 2020 Neurology Unit, Henri Mondor University Hospital, Créteil
- Summer 2017 Institut de Cardiologie de Montréal, Canada (1 month)
- 2012 – 2019 Toulouse University Hospital (clinical rotations in different units)

Research experience

- 2016 **M.Sc. graduate research internship** (6 months)
Max Planck Institute for Neurobiology, Munich, Germany
Optogenetic study of the role of insular cortex in mouse anxiety-related behaviors
Under the supervision of Nadine Gogolla
- 2014 **Research internship** (6 months)
Centre de Physiopathologie de Toulouse Purpan
Study of autoimmunity in a murine model of narcolepsy
Under the supervision of Roland Liblau

Fellowships

Fondation pour la Recherche Médicale

Programme Espoirs de la Recherche (3 years PhD fellowship)

Institut National de la Santé et de la Recherche Médicale (INSERM)

Poste d'accueil (2 years PhD fellowship, turned down for the FRM fellowship)

Agence Régionale de Santé (ARS)

Année Recherche (1 year research fellowship, turned down for the FRM fellowship)

Ecole de l'INSERM Liliane Bettencourt

MD-PhD Programme

Awards

Sorbonne University, 2022, Prix de thèse, Médaille d'Argent

Club Neurovasculaire d'Île de France, 2020, Presentation prize

Faculté de Médecine de Toulouse Purpan, Université Toulouse III Paul Sabatier

Lauréat de la faculté (2013, 2014, 2018, 2019)

Médaille du Baccalauréat, 2012

Publications

Matthys A, Demeret S, Leclercq D, Di Meglio L. Anti-PD-L1 therapy-associated hypophysitis and limbic encephalitis. **Intensive Care Med.** 2022 Nov 2. doi: 10.1007/s00134-022-06911-x. Epub ahead of print. PMID: 36323910.

Matthys A, Megdiche I, Bardel B, Remy P, Limal N, Planté-Bordeneuve V, Gendre T. Broadening the spectrum of the neurological complications in systemic lupus erythematosus: A patient with meningoradiculitis. **Lupus.** 2022 Feb 8;9612033221078227.

Matthys A, Seddik L, Djellaoui A, Faugeras F, Abdelhedi J, Petit A, et al. Forme inflammatoire d'angiopathie amyloïde : à propos d'un cas. **Rev Neurol (Paris).** 2020 Sep;176:S71–2.

Gehrlach DA, Dolensek N, Klein AS, Roy Chowdhury R, **Matthys A**, Junghänel M, et al. Aversive state processing in the posterior insular cortex. **Nat Neurosci**. 2019 Sep;22(9):1424–37.

Bernard-Valnet R, Yshii L, Quériault C, Nguyen XH, Arthaud S, Rodrigues M, Canivet A, Morel AL, **Matthys A**, Bauer J, Pignolet B, Dauvilliers Y, Peyron C, Liblau RS. CD8 T cell-mediated killing of orexinergic neurons induces a narcolepsy-like phenotype in mice. **Proc Natl Acad Sci U S A**. 2016 Sep 27;113(39):10956-61.

Oral and poster communications

3^{ème} Journée Onconeurotox, November 2022

Oral presentation: *Prevalence and characteristics of demyelinating polyradiculoneuropathies associated with Brentuximab Vedotin. A retrospective cohort study.*

Journées de Neurologie de Langue Française (JNLF), September 2020

Oral presentation : *Forme inflammatoire d'angiopathie amyloïde : à propos d'un cas.*

Club Neurovasculaire d'Île de France, January 2020

Poster presentation : *Forme inflammatoire d'angiopathie amyloïde : à propos d'un cas.*

Journées de l'École de l'Inserm Liliane Bettencourt

Oral presentation (September 2015):

Optogenetic study of the role of insular cortex in mouse anxiety-related behaviors

Poster presentation (September 2014):

Study of autoimmunity in a murine model of narcolepsy