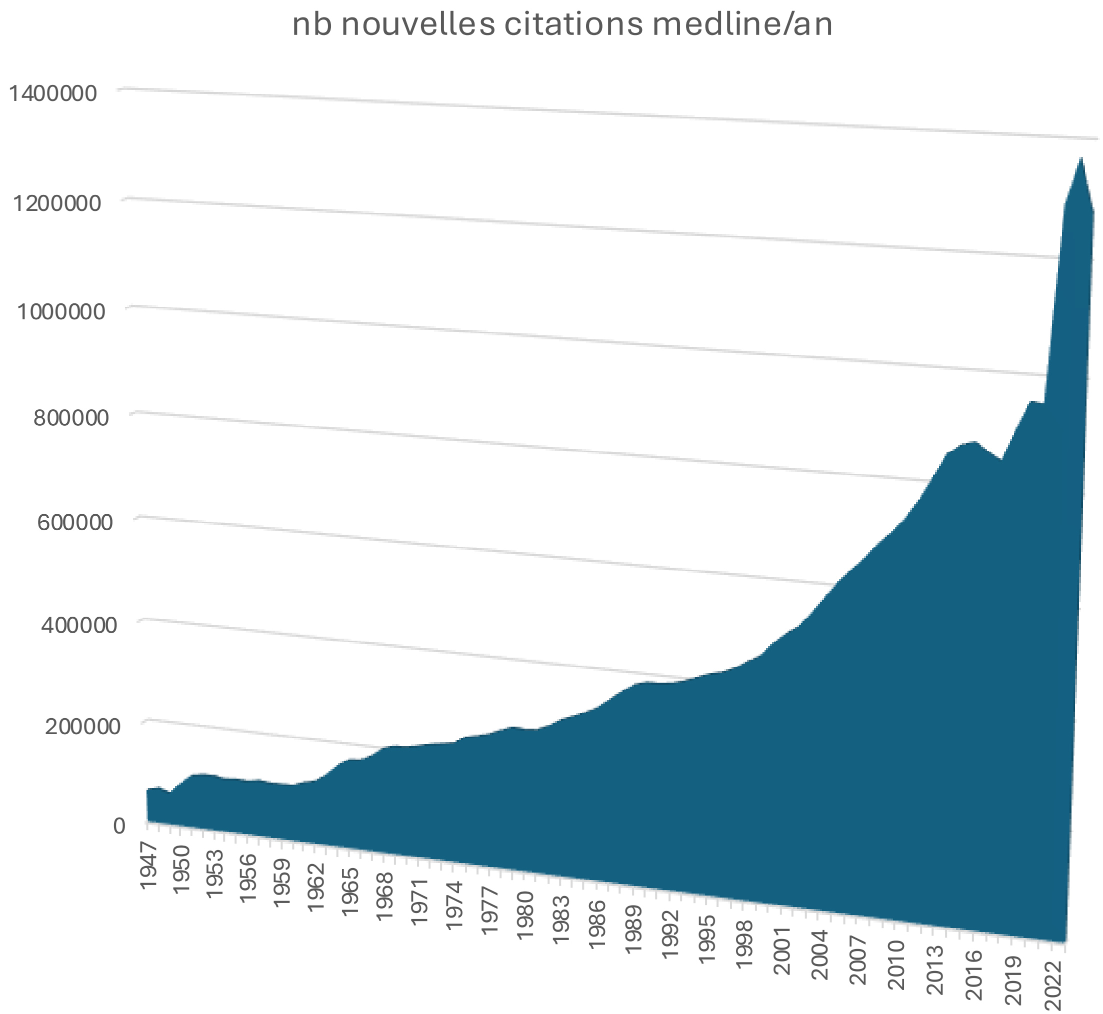
Mettez à jour vos connaissances

Dr Simon JAMARD

Service de maladies infectieuses - CHU de Tours

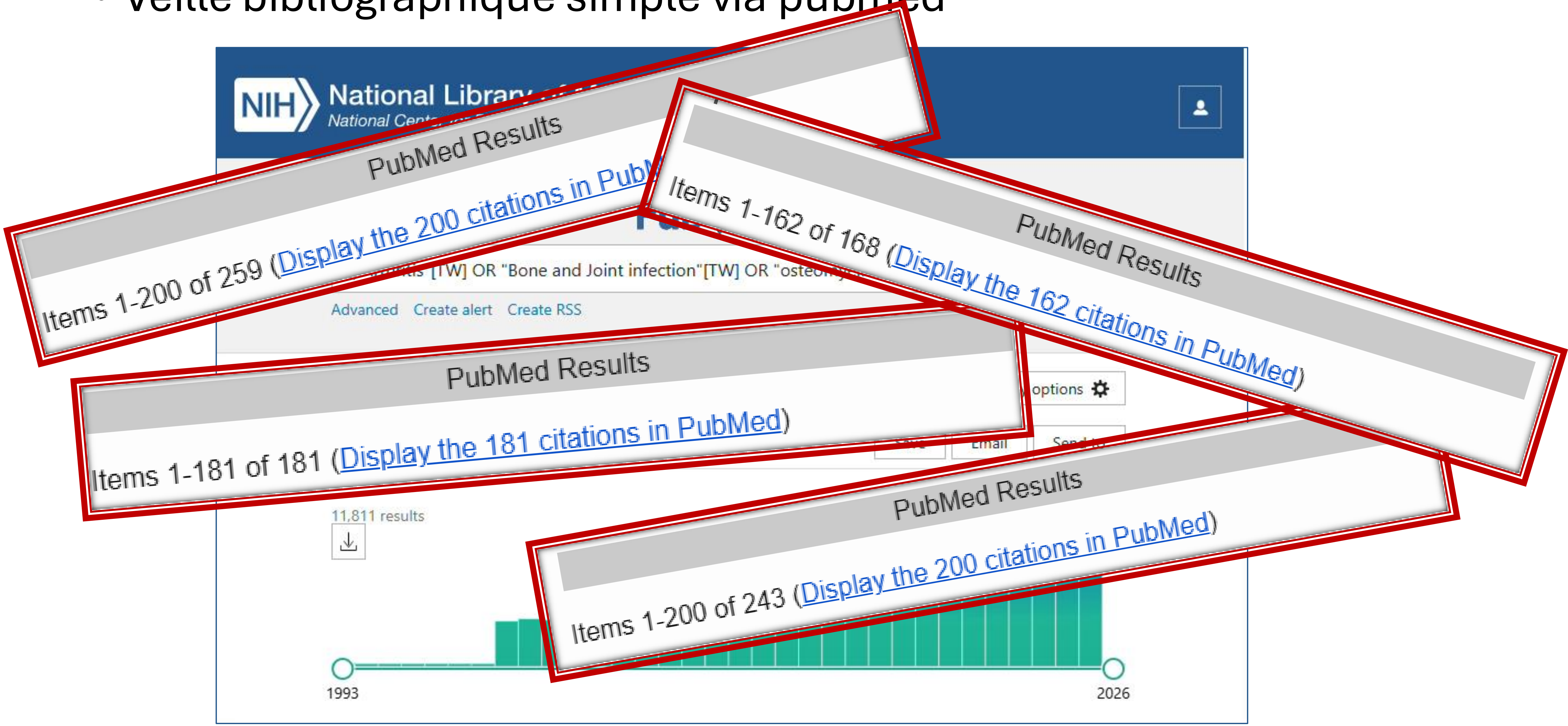
UMR1282 Infectiologie et Santé Publiques

Simon.jamard@univ-tours.fr



Nombre croissant de citations

- Veille bibliographique simple via pubmed



Développement d’outils

Assistant IA

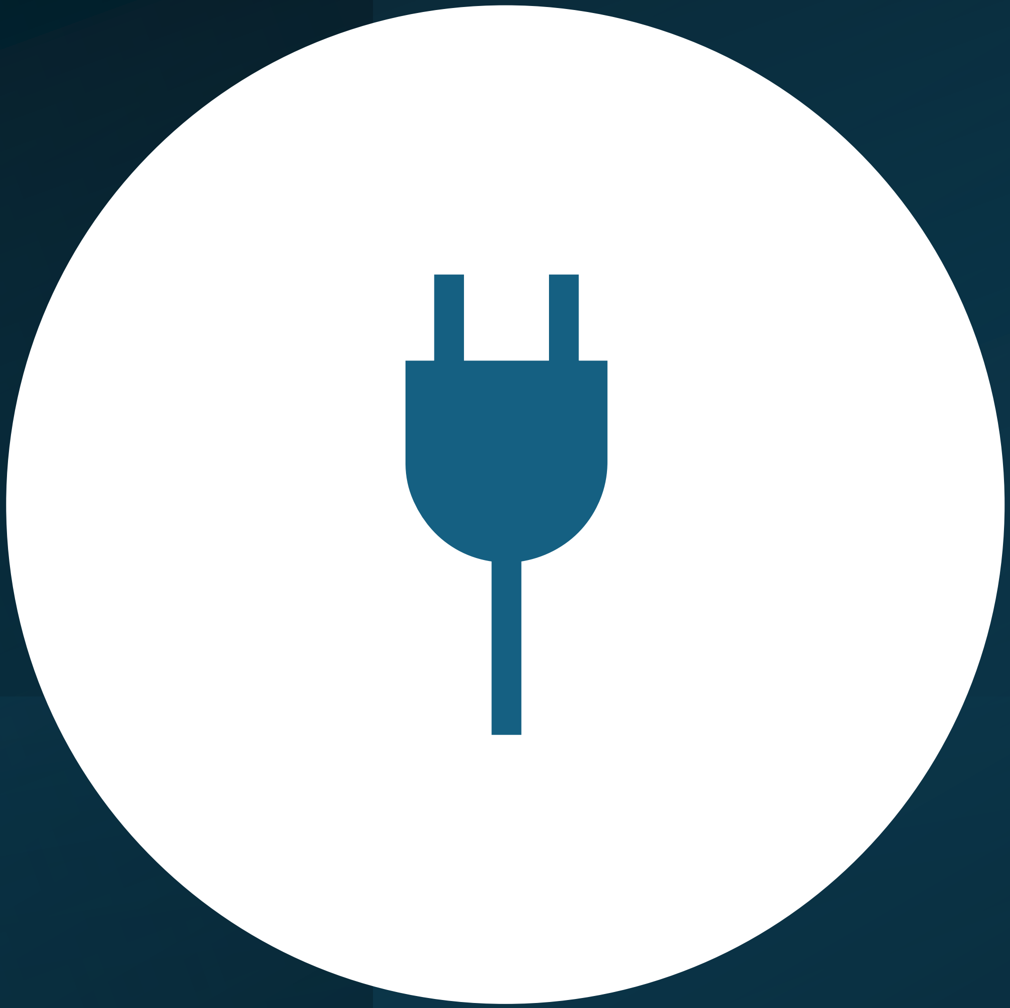
Développement d’outils

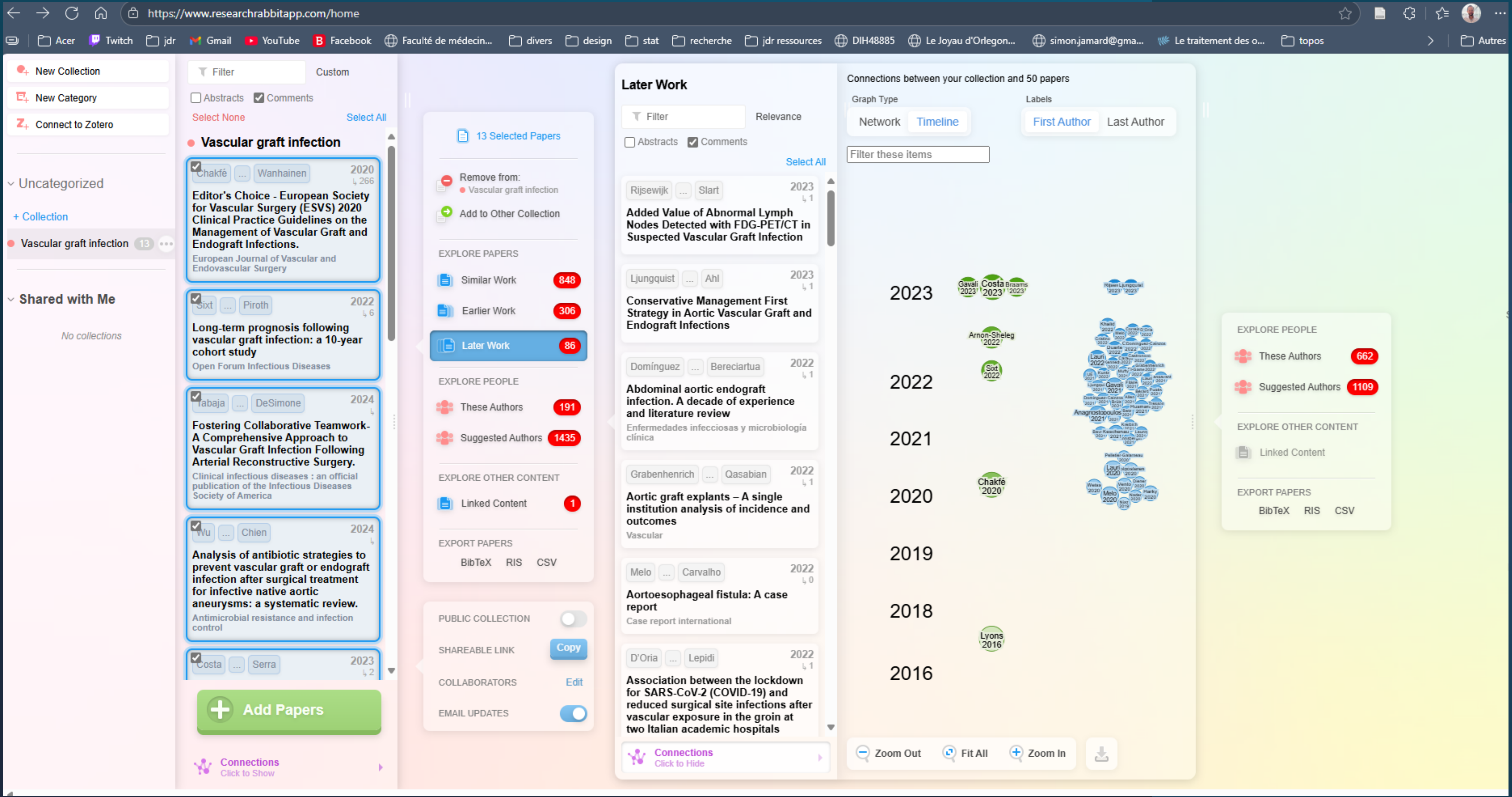
“Screening” scientifique & synthèse

Développement d'outils

Connecteur / analyseur

Connecteur




https://www.researchrabbitapp.com/home
Acer
Twitch
jdr
Gmail
YouTube
Facebook
Faculté de médecin...
divers
design
stat
recherche
jdr ressources
DIH48885
Le Joyau d'Orlegon...
simon.jamard@gma...
Le traitement des o...
topos
Autres
New Collection
New Category
Connect to Zotero
Uncategorized
+ Collection
Vascular graft infection 13
Shared with Me
No collections
Filter
Custom
Abstracts
Comments
Select None
Select All
Vascular graft infection
Chakfé ... Wanhainen 2020 266
Editor's Choice - European Society for Vascular Surgery (ESVS) 2020 Clinical Practice Guidelines on the Management of Vascular Graft and Endograft Infections.
European Journal of Vascular and Endovascular Surgery
Sixt ... Piroth 2022 6
Long-term prognosis following vascular graft infection: a 10-year cohort study
Open Forum Infectious Diseases
Tabaja ... DeSimone 2024
Fostering Collaborative Teamwork-A Comprehensive Approach to Vascular Graft Infection Following Arterial Reconstructive Surgery.
Clinical infectious diseases : an official publication of the Infectious Diseases Society of America
Wu ... Chien 2024
Analysis of antibiotic strategies to prevent vascular graft or endograft infection after surgical treatment for infective native aortic aneurysms: a systematic review.
Antimicrobial resistance and infection control
Costa ... Serra 2023 2
Add Papers
Connections
Click to Show
13 Selected Papers
Remove from:
Vascular graft infection
Add to Other Collection
EXPLORE PAPERS
Similar Work 848
Earlier Work 306
Later Work 86
EXPLORE PEOPLE
These Authors 191
Suggested Authors 1435
EXPLORE OTHER CONTENT
Linked Content 1
EXPORT PAPERS
BibTeX
RIS
CSV
PUBLIC COLLECTION
SHAREABLE LINK
Copy
COLLABORATORS
Edit
EMAIL UPDATES
Later Work
Filter
Relevance
Abstracts
Comments
Select All
Rijsewijk ... Slart 2023 1
Added Value of Abnormal Lymph Nodes Detected with FDG-PET/CT in Suspected Vascular Graft Infection
Ljungquist ... Ahl 2023 1
Conservative Management First Strategy in Aortic Vascular Graft and Endograft Infections
Dominguez ... Bereciartua 2022 1
Abdominal aortic endograft infection. A decade of experience and literature review
Enfermedades infecciosas y microbiología clínica
Grabenhenrich ... Qasabian 2022 1
Aortic graft explants – A single institution analysis of incidence and outcomes
Vascular
Melo ... Carvalho 2022 0
Aortoesophageal fistula: A case report
Case report international
D'Oria ... Lepidi 2022 1
Association between the lockdown for SARS-CoV-2 (COVID-19) and reduced surgical site infections after vascular exposure in the groin at two Italian academic hospitals
Connections
Click to Hide
Connections between your collection and 50 papers
Graph Type
Network
Timeline
Labels
First Author
Last Author
Filter these items
2023
2022
2021
2020
2019
2018
2016
Gavali 2023
Costa 2023
Braams 2023
Arnon-Sheleg 2022
Sixt 2022
Chakfé 2020
Lyons 2016
Zoom Out
Fit All
Zoom In
EXPLORE PEOPLE
These Authors 662
Suggested Authors 1109
EXPLORE OTHER CONTENT
Linked Content
EXPORT PAPERS
BibTeX
RIS
CSV

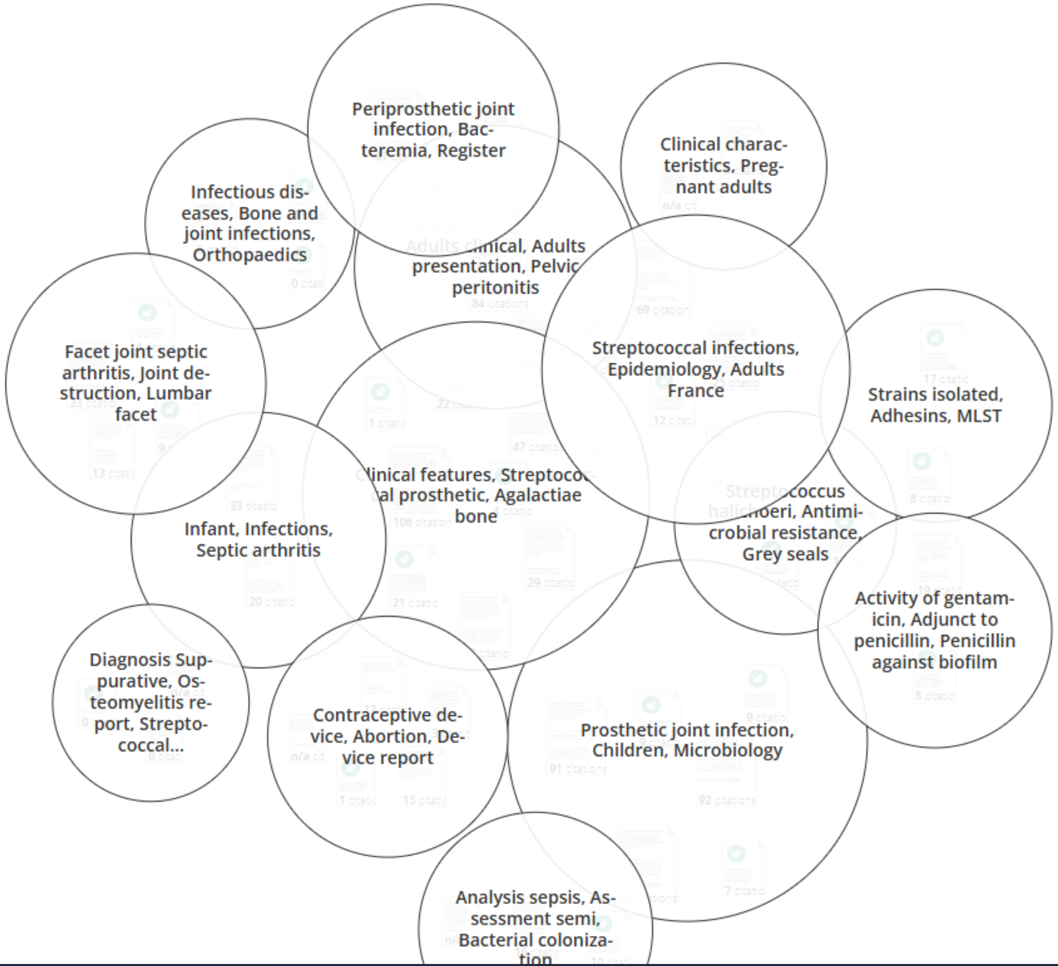
OPEN KNOWLEDGE MAPS
Your guide to scientific knowledge

Search About Team Community Projects News FAQs Get in touch Become a supporting member

Knowledge Map of **streptococcus agalactiae bone and joint infection**

55 most relevant documents Data source: PubMed Until 23 Oct 2025 Document types All lang More information

Cite



Overview (55 documents)

Search within visualization... show: Any sort by: Citations

The Not-So-Good Prognosis of Streptococcal Periprosthetic Joint Infection Managed by Implant Retention: The Results of a Large Multicenter Study. (2017)

Jaime Lora-Tamayo, Éric Senneville, Alba Ribera, Louis Bernard, Michel Dupon, Valérie Zeller, Ho Kwong Li, Cédric Arvieux, Martin Clauss, Ilker Uçkay, Dace Vigante, Tristan Ferry, José Antonio Iribarren, Trisha N Peel, ... Group of Investigators for Streptococcal Prosthetic Joint Infection

Clinical infectious diseases : an official publication of the Infectious Diseases Society of America

[doi]: https://doi.org/10.1093/cid/cix227

Streptococci are not an infrequent cause of periprosthetic joint infection (PJI). Management by debridement, antibiotics, and implant retention (DAIR) is thought to produce a good prognosis, but little is known about the real likelihood of success.A retrospective, observational, multicente...

106 citations

Export

Area: Clinical features, Streptococcal prosthetic, Agalactiae bone

Analysis of postoperative and hematogenous prosthetic joint-infection microbiological patterns in a large cohort. (2018)

Valérie Zeller, Younes Kerroumi, Vanina Meyssonnier, Beate Heym, Marie-Astrid Metten...

The Journal of infection

[doi]: https://doi.org/10.1016/j.jinf.2017.12.016

This study was undertaken to analyze prosthetic joint infection (PJI)-causing microorganisms and compare their distribution patterns according to PJI classification.Cohort study from a single referral center for bone-and-joint infections from January 2004 to December 2015.Nine hundred...

99 citations

Export

Area: Prosthetic joint infection, Children, Microbiology

Improved diagnosis specificity in bone and joint infections using molecular tech-

Screening / synthèse

Problématique :
Création de fausses références

https://openalex.org/works?page=1&filter=title_and_abstract.search:streptococcus+agalactiae+biofilm

Acer · Twitch · jdr · Gmail · YouTube · Facebook · Faculté de médecin... · divers · design · stat · recherche · jdr ressources · DIH48885 · Le Joyau d'Orlegon... · simon.jamard@gma... · Le traitement des o... · topos · Autres

Unsaved search

Show works where:

1 Title & Abstract includes "streptococcus agalactiae biofilm"

Works

Dual Role for Pilus in Adherence to Epithelial Cells and Biofilm Formation in Streptococcus agalactiae
2009 · Yoan Konto-Ghiorghi, Émilie Mairey, et al. · *PLoS Pathogens*
Cited by 232 PDF

Recombinant of the Staphylococcal Bacteriophage Lysin CHAPk and Its Elimination against Streptococcus agalactiae Biofilms
2020 · Yuxue Shan, Na Yang, et al. · *Microorganisms*
Cited by 19 PDF

Biofilm formation by Streptococcus agalactiae: influence of environmental conditions and implicated virulence factors
2015 · Roberto Rosini, Immaculada Margarit · *Frontiers in Cellular and Infection Microbiology*
Cited by 119 PDF

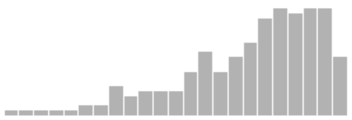
Synergistic antibiotic activity against planktonic and biofilm-embedded Streptococcus agalactiae, Streptococcus pyogenes and Streptococcus oralis
2017 · Mercedes González Moreno, Andrej Trampuž, et al. · *Journal of Antimicrobial Chemotherapy*
Cited by 66

Optimization of Streptococcus agalactiae Biofilm Culture in a Continuous Flow System for Photoinactivation Studies
2021 · Michał Pierański, Michał Rychłowski, et al. · *Pathogens*
Cited by 6 PDF

Stats

211 results

Year



Open Access

67,8%
143

Topic

☐	Neonatal and Maternal Infections	85
☐	Bacterial biofilms and quorum sensing	15
☐	Streptococcal Infections and Treatments	13
☐	Milk Quality and Mastitis in Dairy Cows	13
☐	Reproductive tract infections research	9

More...

Institution

☐	Vanderbilt University	10
☐	United States Department of Veterans Affairs	9
☐	Veterans Health Administration	9
☐	Vanderbilt Health	9
☐	Vanderbilt University Medical Center	9

More...

Type

☐	article	177
☐	preprint	13
☐	review	10
☐	dissertation	6
☐	book-chapter	2

More...

https://platform.futurehouse.org/trajectories/a68f90b2-c80f-4491-a525-c5d9e11307ea

Acer Twitch jdr Gmail YouTube Facebook Faculté de médecin... divers design stat recherche jdr ressources DIH48885 Le Joyau d'Orlegon... simon.jamard@gma... Le traitement des o... topos

Platform

New Task

Projects

Recent Tasks view all

Management guideline for p...

Advantage of viral detection ...

Testing Streptococcus agala...

Biofilm production factors in ...

API

Models

Feedback

Theme

what are the factors involved with biofilm production in Streptococcus agalactie strains

Falcon - Deep Search

SUCCESS Started: 10/20/2025, 6:35:08 AM Share

Results Reasoning References 11

INITIALIZED

```
Use the tools to answer the question: what are the factors involved with biofilm production in Streptococcus agalactie strains

Your agent has been given the following instruction:
When the answer looks sufficient, you can terminate by calling the complete tool. Be thorough and try to provide at least 10 relevant sources for each query.
```

01 PAPER SEARCH

query: factors involved in biofilm production in Streptococcus agalactiae, min_year: 2015

1 Biofilm production and other virulence factors in Streptococcus spp. isolated from clinical cases of bovine mastitis in Poland
Edyta Kaczorek, Joanna Małaczewska, Roman Wójcik, Andrzej Krzysztof Siwicki • BMC Veterinary Research, Dec 2017 PEER REVIEWED • citations 78

2 Biofilm formation by staphylococci and streptococci: structural, functional, and regulatory aspects and implications for pathogenesis
Pietro Speziale, Joan A. Geoghegan • Frontiers in Cellular and Infection Microbiology, Apr 2015 • citations 41

3 Anti-Biofilm Effect of Tea Saponin on a Streptococcus agalactiae Strain Isolated from Bovine Mastitis
Fei Shang, Hui Wang, Ting Xue • Animals, Sep 2020 PEER REVIEWED • citations 23

4 Biofilm formation on different pH conditions by Streptococcus agalactiae isolated from bovine mastitic milk
P. S. D. Miranda, Pamella Silva Lannes-Costa, B. A. Pimentel, L. B. Silva, B. T. Ferreira-Carvalho, G. Menezes, A. Mattos-Guaraldi, R. Hirata, R. Mota, P. E. Nagao • Letters in Applied Microbiology, Jul 2018 PEER REVIEWED • citations 26

5 Streptococcus pyogenes biofilms—formation, biology, and clinical relevance
Tomas Fiedler, Thomas KÃ¶ller, Bernd Kreikemeyer • Frontiers in Cellular and Infection Microbiology, Feb 2015 • citations 158

6 Antibiotic resistance, biofilm formation, and virulence genes of Streptococcus agalactiae serotypes of Indian origin
Shalini Verma, Monika Kumari, Anurag Pathak, Vikas Yadav, Atul Kumar Johri, Puja Yadav • BMC Microbiology, Jul 2023 PEER REVIEWED • citations 14

7 CRISPR Contributes to Adhesion, Invasion, and Biofilm Formation in Streptococcus agalactiae by Repressing Capsular Polysaccharide Production

https://platform.futurehouse.org/trajectories/a68f90b2-c60f-4491-a525-c5d9e1130?ea

Acer | Twitch | jdr | Gmail | YouTube | Facebook | Faculté de médecin... | divers | design | stat | recherche | jdr ressources | DIH48885 | Le Joyau d'Orlegon... | simon.jamard@gma... | Le traitement des o... | topos | Aut

Platform

New Task

Projects

Recent Tasks view all

Management guideline for p...

Advantage of viral detection ...

Testing Streptococcus agala...

Biofilm production factors in ...

API

Models

Feedback

Theme

S Simon Nilcyti

what are the factors involved with biofilm production in Streptococcus agalactie strains

Falcon - Deep Search

SUCCESS Started: 10/20/2025, 6:35:08 AM Share

Results Reasoning References 11

Factors Involved in Biofilm Production in Streptococcus agalactiae Strains

Abstract—Streptococcus agalactiae (Group B Streptococcus, GBS) is an opportunistic pathogen capable of forming biofilms that facilitate colonization, persistence, and antibiotic tolerance. This report provides a detailed analysis of the multifactorial influences—both environmental and genetic—that regulate biofilm production in S. agalactiae. Key environmental factors include nutrient availability, specifically glucose supplementation, pH conditions, and incubation duration, all of which directly affect biofilm biomass and structural characteristics. On the genetic side, variations in pilus gene profiles, capsular polysaccharide expression, and the presence of multiple virulence determinants underpin strain-to-strain variability in biofilm-forming ability. Furthermore, interactions between environmental cues and the bacterial regulatory systems (e.g., the CsrRS two-component system) modulate the expression of adhesins and extracellular matrix components, ultimately influencing the biofilm phenotype. This report synthesizes the current state of knowledge, drawing upon multiple peer-reviewed studies with a focus on delineating how these diverse factors act in concert to regulate biofilm development and, consequently, the virulence and antibiotic resistance of S. agalactiae (1.1, 2.1).

I. Introduction

Biofilms are structured communities of bacteria that adhere to biological or abiotic surfaces and are encased in a self-produced extracellular polymeric matrix. In S. agalactiae, biofilm formation is critically linked with the ability to persist in host environments, evade immune responses, and resist antimicrobial treatments. As a result, understanding the factors that drive biofilm production is essential for developing mitigation strategies against infections in both human and veterinary contexts. Recent studies have shown that biofilm production in S. agalactiae is regulated by a complex interplay between environmental conditions such as nutrient composition and pH, and genetic factors including the expression of virulence genes and pilus structures (1.2, 3.1). The strong association between biofilm formation and strain virulence further underscores the importance of characterizing these regulatory parameters. This report will discuss the various environmental and genetic factors that influence biofilm production, describe the underlying mechanisms identified by recent research, and highlight the implications for pathogenicity and treatment.

II. Environmental Factors Affecting Biofilm Production

A. Glucose Supplementation and Nutrient Availability

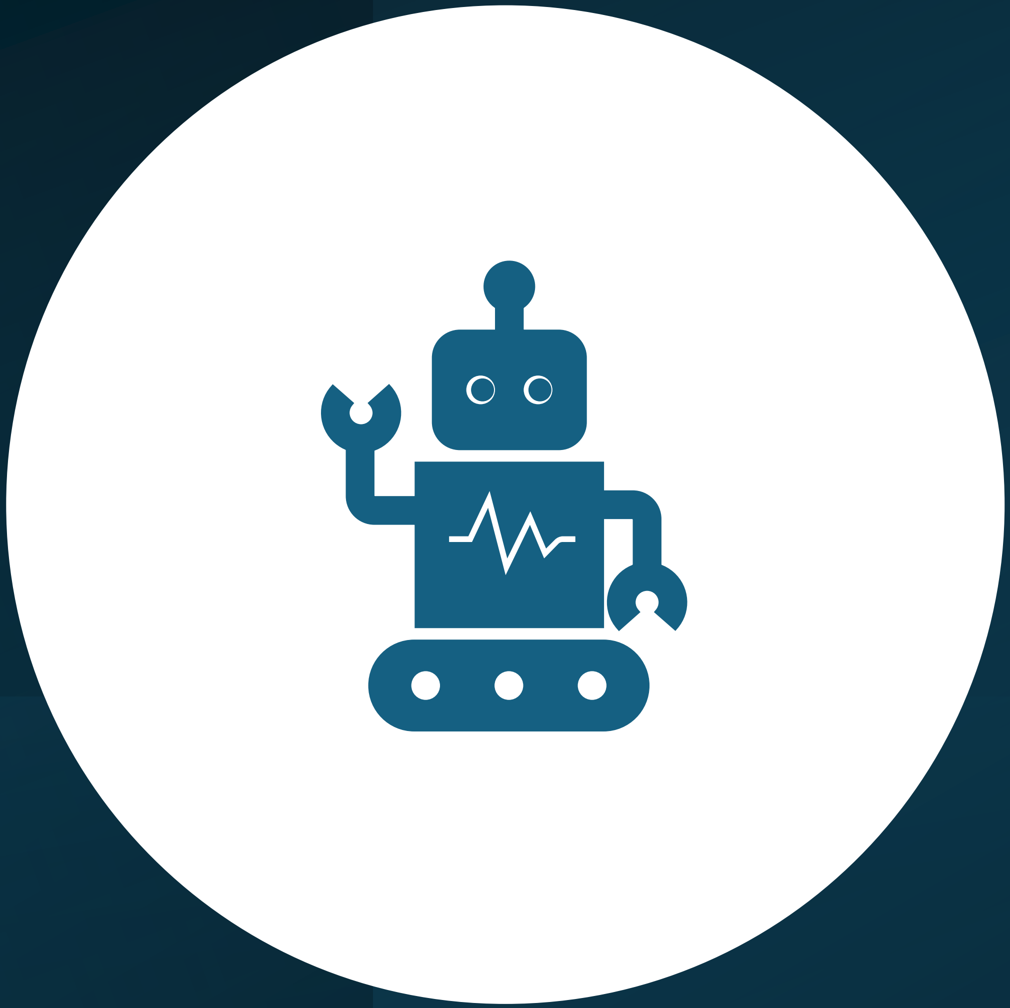
Glucose is one of the most well-studied environmental variables affecting biofilm production in S. agalactiae. Multiple studies have demonstrated that the addition of glucose to culture media markedly enhances biofilm formation. For example, research has indicated that biofilm formation increases 4- to 7-fold in the presence of 1% glucose compared to standard conditions, underscoring the role of nutrient availability in modulating bacterial adherence (1.1, 4.1). The mechanism behind this enhancement is thought to be twofold. First, glucose metabolism leads to the production of organic acids which can lower the pH of the medium and thereby modulate the expression of surface-associated proteins that facilitate adhesion (2.1, 4.2). Second, in nutrient-limited environments, the addition of glucose provides a metabolic boost that allows bacteria to invest in the production of extracellular matrix components, particularly proteins and extracellular DNA, which are crucial for the stable establishment of biofilms (1.3). Thus, glucose supplementation acts as both a metabolic substrate and a signaling molecule that triggers biofilm formation in a nutrient-dependent manner.

B. pH Conditions

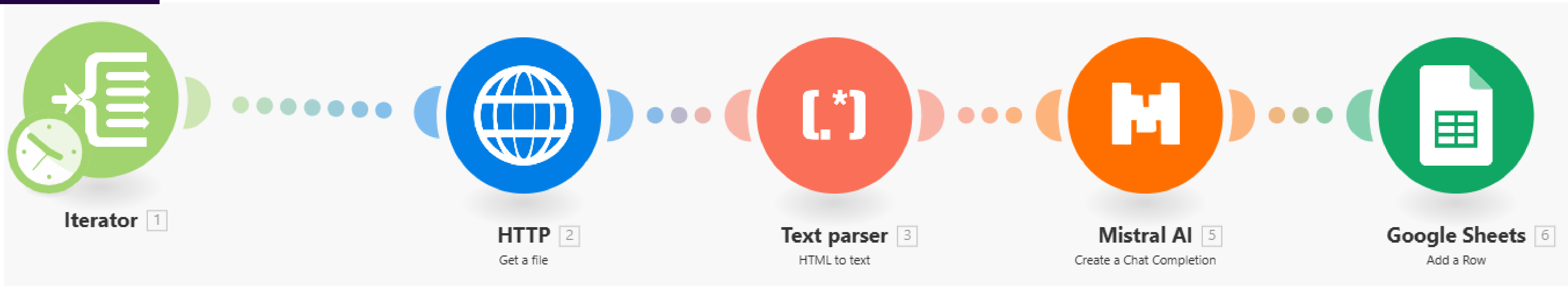
The pH of the growth medium represents another critical environmental parameter influencing biofilm production. S. agalactiae exhibits differential biofilm formation at varying pH levels, with studies showing that biofilm amounts are significantly higher under slightly alkaline conditions (e.g., pH 7.6) compared to acidic (pH 4.5) or neutral conditions (pH 7.0) (2.1, 4.2). However, interestingly, some studies also report that low pH conditions can stimulate enhanced adhesion by altering the expression profile of key surface proteins implicated in biofilm formation (4.3, 4.2). It has been proposed that the acidic environment, which can result from the production of organic acids during glucose metabolism, leads to the upregulation of cell-surface adhesins and triggers a transition to a sessile lifestyle. This dual effect of pH—acting both as an inhibitory factor when extremes are reached and as an inducer under moderate conditions—highlights the delicate balance that S. agalactiae must maintain to optimize biofilm formation (4.3, 4.4). Additionally, experimental data demonstrate that pH not only influences the quantity of biofilm formed but also affects its architecture, as seen in time-dependent structural transitions from monolayered aggregates to complex, multilayered matrices (4.1).

C. Incubation Time and Temporal Dynamics

Automatisation



Automatisation de taches



Récupération/extraction des données du site d'interet

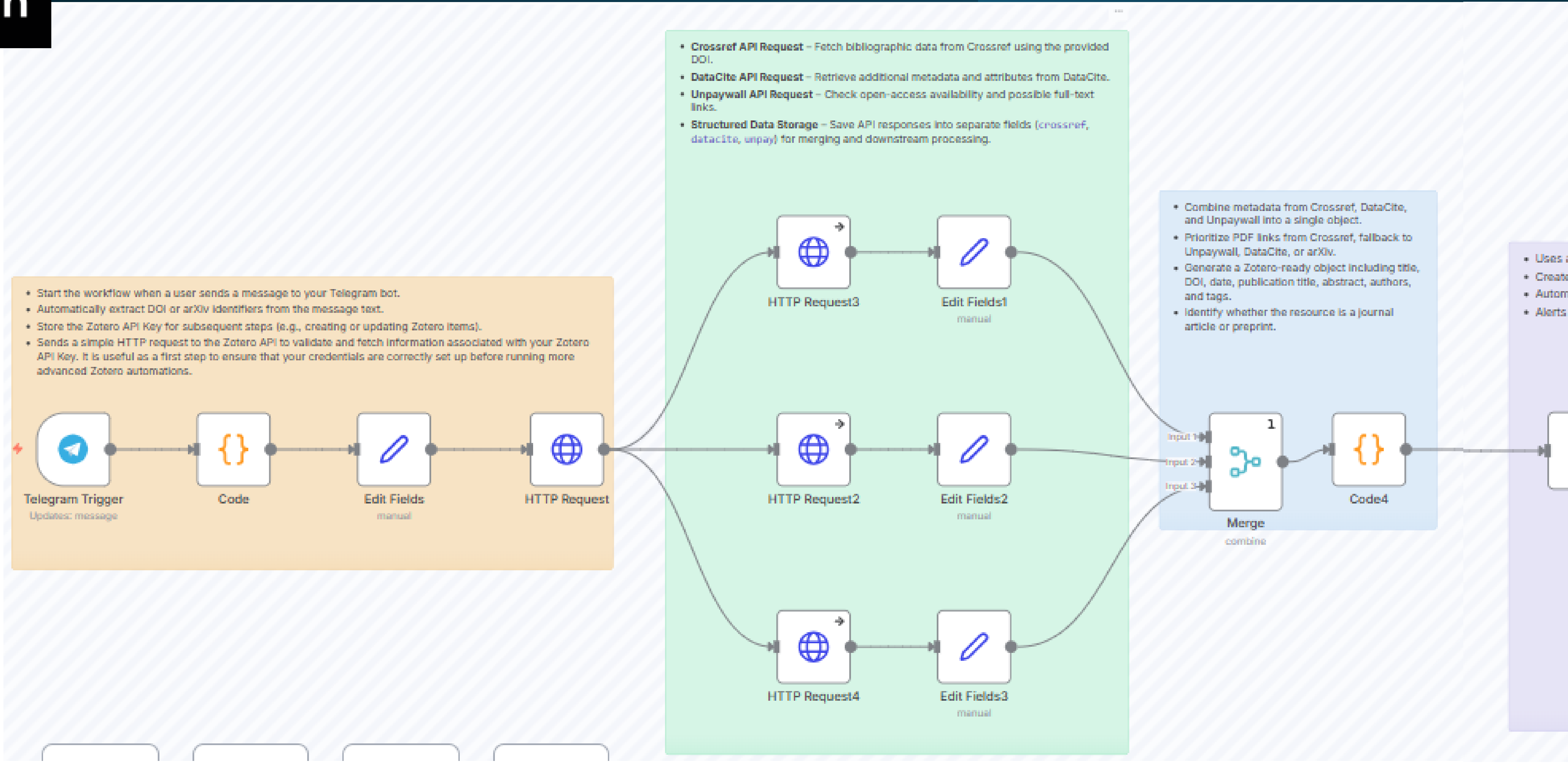
« A partir du texte brut fourni ci-dessous, résume en 3 bulletpoints chacune des news IA ou IA générative. Le résultat doit inclure : 1. Un court titre d'article ; 2. le journal extrait , 3. Le résumé en 3 bulletpoints ; 4. Quelques mots-clés associés à l'article. N'utilise pas de mise en forme superflue (gras, italique,...) ou de fioritures.
N'inclus aucun autre texte dans ta réponse.
Texte brut : {{3.text}} »

Automatisation de taches

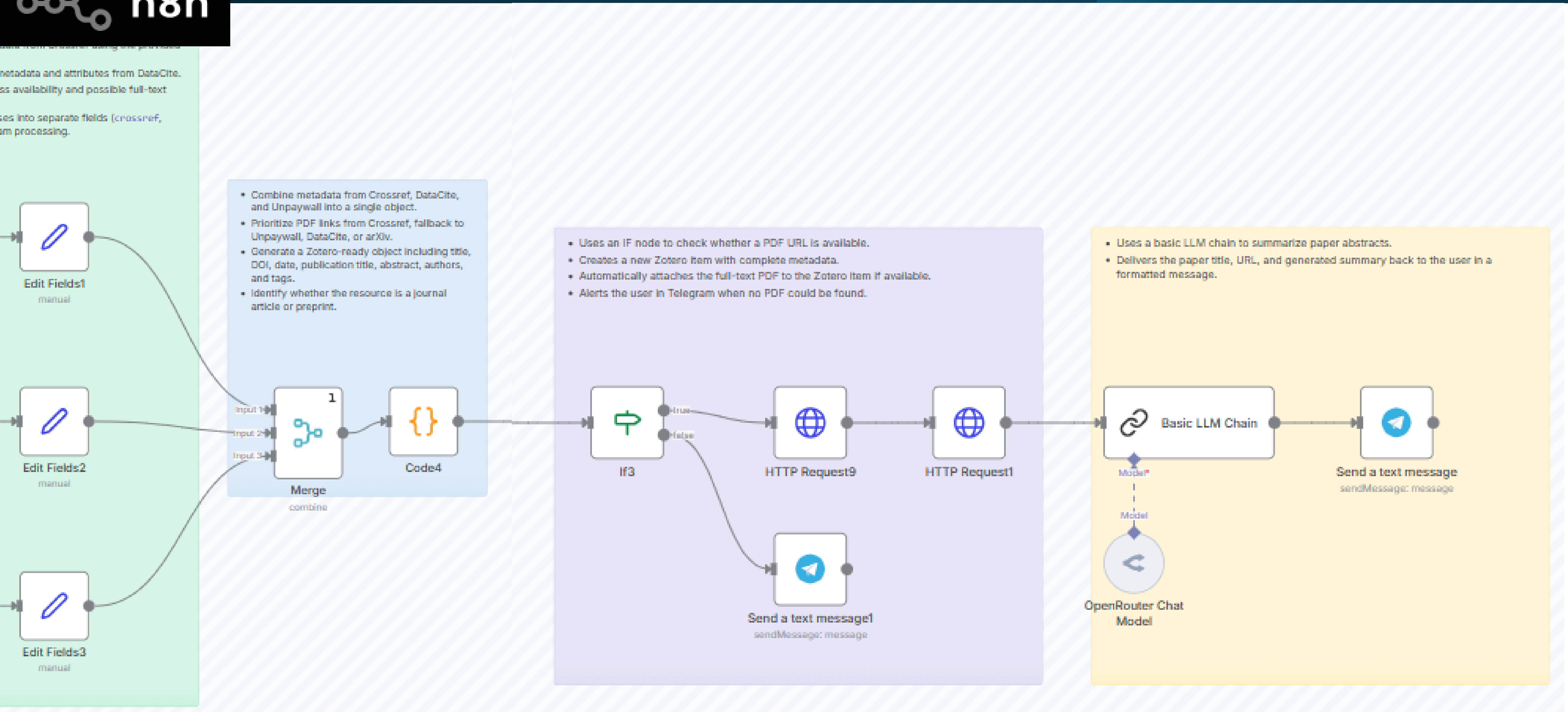
3	2025-10-15T14:·	https://www.thelancet.com/jourr	1. **L'IA générative au service de la lutte contre les maladies infectieuses** - Une série d'articles explore comment l'IA générative peut soutenir la communauté médicale dans la compréhension et la gestion des maladies infectieuses, en analysant des données complexes et en optimisant les diagnostics. - Les experts discutent des applications potentielles, comme l'identification rapide de souches virales ou l'optimisation des protocoles de traitement via des modèles prédictifs. - L'objectif est d'aider les professionnels à s'adapter à un paysage technologique en évolution, tout en soulignant les défis éthiques et opérationnels. Mots-clés : IA générative, maladies infectieuses, diagnostics, modèles prédictifs, santé publique, éthique. --- 2. **Podcast : L'IA et les infections chez les patients immunodéprimés** - Un épisode de podcast aborde l'utilisation de l'IA pour prévenir et gérer les infections chez les patients immunodéprimés, en se concentrant sur la stewardship diagnostique et antimicrobienne. - Les intervenants, des chercheurs du Fred Hutchinson Cancer Center, présentent des stratégies basées sur l'IA pour améliorer la détection précoce et personnaliser les traitements. - L'accent est mis sur l'intégration de l'IA dans les protocoles cliniques existants pour réduire les risques d'infections nosocomiales ou opportunistes. Mots-clés : IA, immunodépression, stewardship antimicrobien, détection précoce, infections nosocomiales, oncologie. --- 3. **Série spéciale : Cartographie des applications de l'IA en santé mondiale** - Une discussion audio avec Anna Odone et ses collègues examine comment l'IA peut transformer la surveillance et la réponse aux épidémies dans un contexte de santé mondiale. - Les applications incluent l'analyse de données épidémiologiques en temps réel, la modélisation de la propagation des maladies, et l'optimisation des campagnes de vaccination. - Les limites techniques (biais des données, accessibilité) et les opportunités pour les pays à ressources limitées sont également abordées. Mots-clés : IA, santé mondiale, épidémiologie, modélisation, vaccination, pays à faible revenu.
			1. **L'IA générative optimise la détection du streptocoque B chez les femmes enceintes** - Une étude évalue un nouvel algorithme basé sur l'IA pour détecter le *Streptococcus agalactiae* (streptocoque B) chez les femmes enceintes, améliorant la précision par rapport aux méthodes traditionnelles. - L'algorithme réduit les faux négatifs et permet une prise en charge précoce, limitant les infections néonatales précoces liées à cette bactérie. - Son déploiement pourrait standardiser les protocoles de dépistage et réduire les coûts associés aux complications néonatales. *Mots-clés* : algorithme IA, streptocoque B, dépistage prénatal, infections néonatales, diagnostic automatisé

Automatisation de taches

n8n



Automatisation de taches



Analyseur

https://notebooklm.google.com/notebook/dc3e669e-9f7d-4695-b70c-b6549de0d9f7

Acer | Twitch | jdr | Gmail | YouTube | Facebook | Faculté de médecin... | divers | design | stat | recherche | jdr ressources | DIH48885 | Le Joyau d'Orlegon... | simon.jamard@gma... | Le traitement des o... | topos | Autres fav

Streptococcus Agalactiae: Virulence, Biofilms, and Therapeutics

Partager | Paramètres

Sources

+ Add | Découvrir

Sélectionner toutes les sources

abstract-streptococ-set.txt

Discussion

Actualiser

Streptococcus Agalactiae: Virulence, Biofilms, and Therapeutics

1 source

Ces sources décrivent de manière approfondie la bactérie **Streptococcus agalactiae (GBS)**, se concentrant principalement sur sa **formation de biofilm**, ses **facteurs de virulence** et sa **résistance aux antibiotiques**. Plusieurs études identifient les profils épidémiologiques et de résistance aux médicaments de souches isolées de **femmes enceintes** dans des régions comme l'Amazonie brésilienne et le Nigeria, soulignant une prévalence élevée de sérotypes spécifiques et une résistance significative à la tétracycline et à l'érythromycine. La recherche mécanistique révèle des régulateurs importants comme **PhoB** et **CsrR**, qui modulent la formation du biofilm et l'expression des gènes de virulence, ainsi que l'impact du GBS sur d'autres infections, notamment en favorisant la formation de biofilm de **Gardnerella vaginalis** par la voie LuxS/AI-2. Enfin, les sources explorent diverses **stratégies antibiofilm et antibactériennes**, y compris l'utilisation de métabolites de bactéries actives de nucléation de glace, de dérivés de loratadine et de la protéine lectine recombinante PFL-96, et des mécanismes pour surmonter la **résistance aux bêta-lactamines** dans les souches hypervirulentes.

Enregistrer dans une note

Résumé vidéo | Rés... audio | Carte mentale

Commencez à écrire... 1 source

Comment les régulateurs génétiques comme PhoB et CsrR modulent-ils la virulence et la formation de biofilm ?

Quelles sont les caractéristiques épidémiologiques et génétiques des souches de Streptococcus agalactiae ém...

Studio

Nano Banana est désormais disponible dans les résumés vidéo ! Essayez les nouveaux styles.

Résumé audio | Résumé vidéo | Carte mentale

Rapports | Fiches d'apprentissage | Quiz

Streptocoque B et Biofilms: Faut-il Cibler la...
Débat · 1 source · Il y a 16 h

Streptocoque Fiches
1 source · Il y a 16 h

Streptococcus agalactiae : Virulence et Résistanc...
1 source · Il y a 2 j

Streptococcus Agalactiae
1 source · Il y a 3 j

Streptocoque du Groupe B : Guerre Totale...
1 source · Il y a 3 j

Synthèse sur la formation de biofilms par...
Synthèse de recherche · 1 source · Il y a 3 j

Ajouter une note

NotebookLM peut se tromper. Veuillez donc vérifier ses réponses.