ORA collection on AI & Machine Learning launch event

2024 March 19th 10:00-11:30

Alessandra Vetrugno
Lead Librarian for Physical and Applied Sciences

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Agenda

Introduction and welcome

Lightning talks

- Transfer learning for heterocycle synthesis prediction
  - Ewa Wieczorek, DPhil student in the Department of Chemistry

- Machine learning-based potentials for modelling chemical reactions in the gas phase and solution
  - Veronika Juraskova, Postdoctoral researcher in the Department of Chemistry
- Learning to Adapt: Rational Personalization of Cancer Treatment Schedules using Deep Reinforcement Learning
  - Kit Gallagher, DPhil student in the Mathematical Institute
- Simulation and analysis of highly polygenic traits
  - Daiki Tagami, Dphil student in the Department of Statistics
- AI & Elections in Africa
  - Michael Collyer, DPhil student at the Oxford Internet Institute
- International governance of civilian AI via jurisdictional certification
  - Benjamin Harack, DPhil student in the Department of Politics and International Relations and DPhil Affiliate at the Oxford Martin AI Governance Initiative

Networking & Refreshments

Posters

- Using AI-generated speech to inform historical sound change (with specific reference to Old English vowel breaking)
  - Jonathan Wei, DPhil student in the Department of Linguistics, Philology and Phonetics
- A Reinforcement Learning approach to Hamiltonian Eigenvalue Solving
  - Oliver Chapman, DPhil student in the Department of Chemistry
- Trustworthiness Auditing for Artificial Intelligence Systems
  - Kaivalya Rawal, Postdoctoral researcher at the Oxford Internet Institute

Oxford University Research Archive (ORA)

An ORA AI Collection

ORA service

Oxford University Research Archive (ORA) - Institutional Repository for the University, collecting, preserving and disseminating Oxford's research: including journal articles, conference papers, book sections, reports, working papers, posters, research theses, and research data.

Currently ~289k records, and ~117 full text available.

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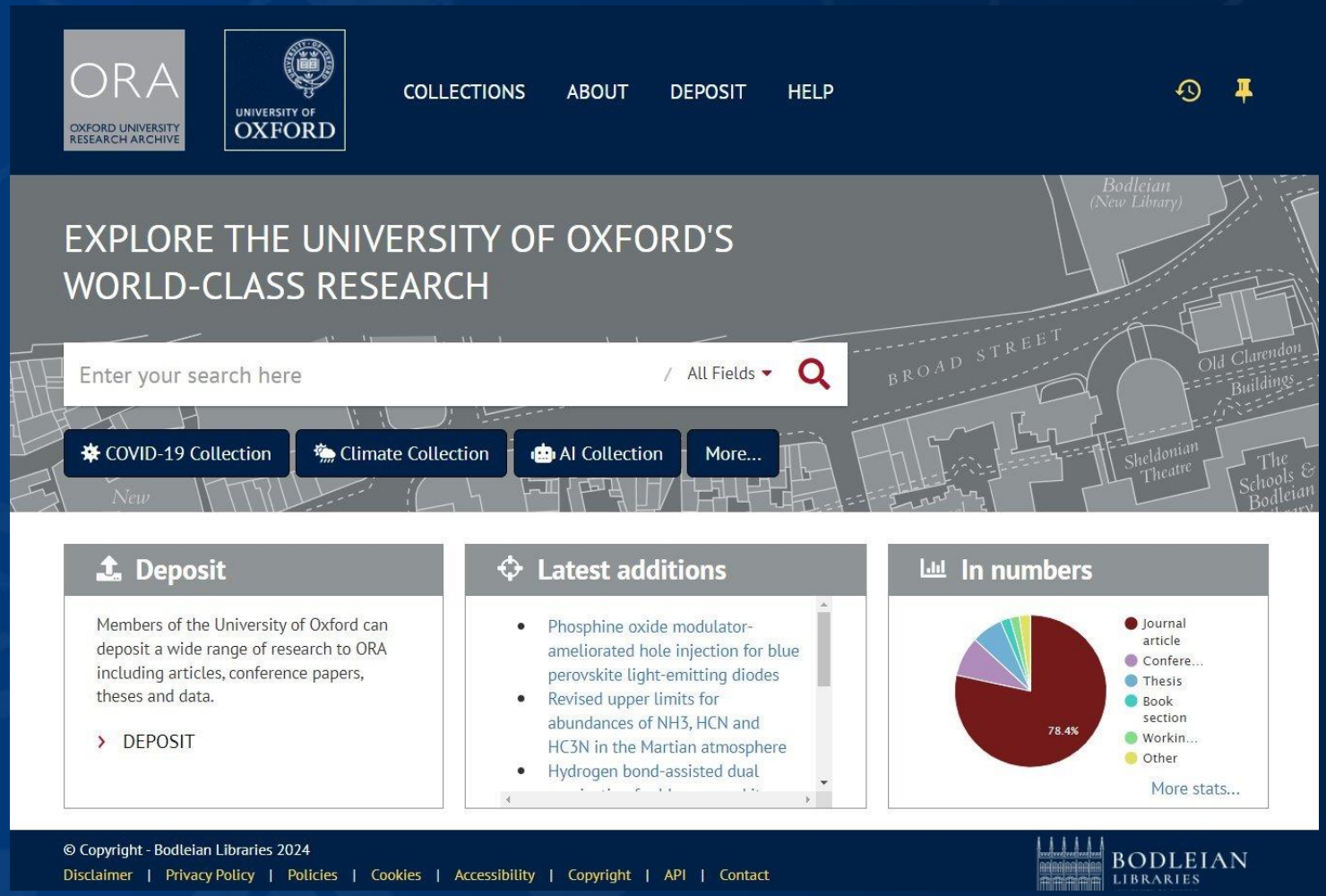

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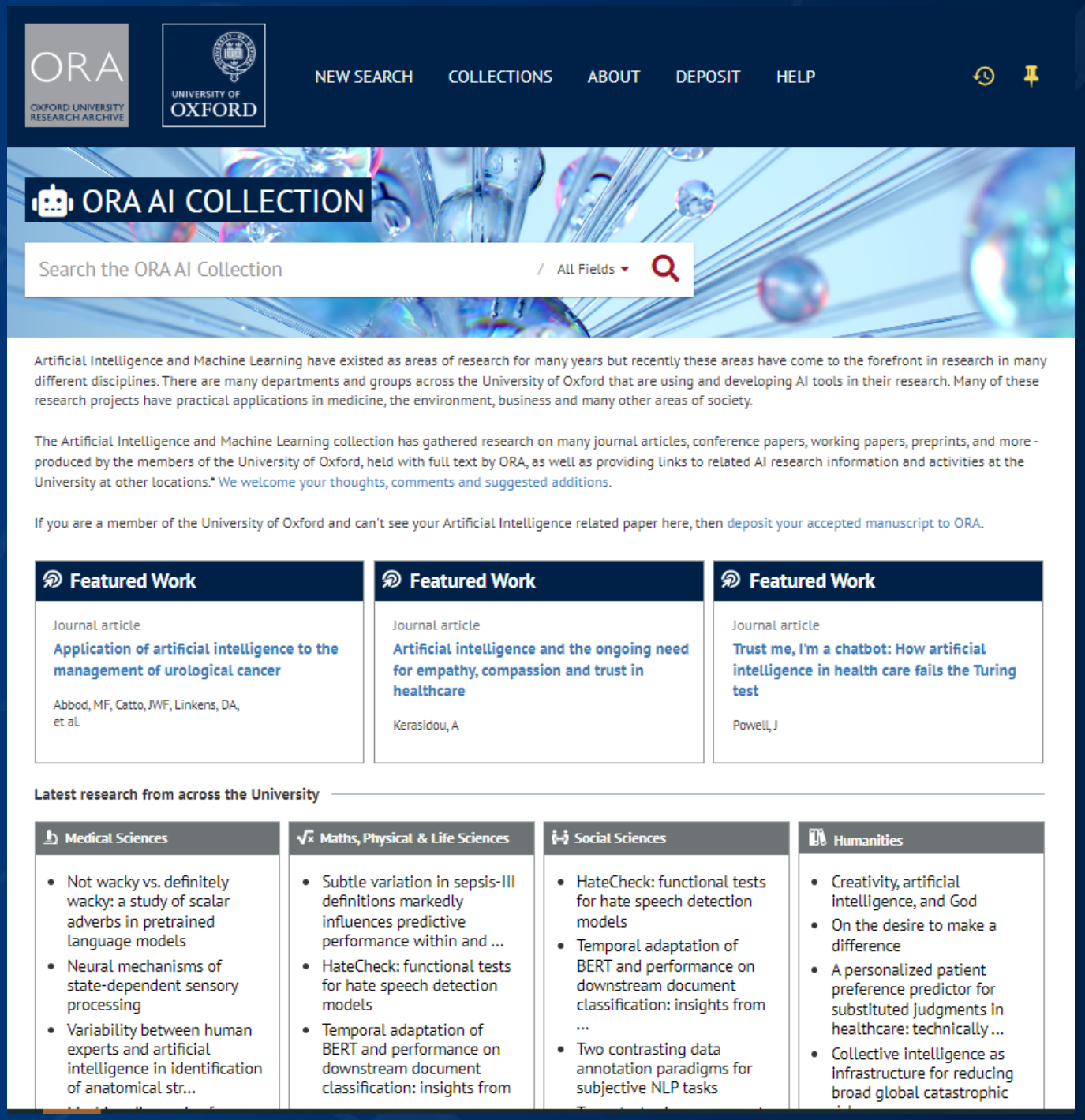
ORA AI Collection

- Currently 6,345 records of content
  - 4,566 with full text available to download

- Bringing together research on AI and Machine Learning from within ORA across the divisions into a single space
- Providing barrier free global access without paywall, login, or subscription
- Enabling research to be available to policy and practice makers

- Since October 2023 >80k views, ~50k downloads

https://ora.ox.ac.uk/collections/ai



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