

### Career profiles: researchers



# Q Clinical researcher

The researcher is a practicing healthcare professional\* with strong and focused research expertise on patient populations in need of clinical innovations. This expertise stimulates collaboration with stakeholders for executing clinical trials and clinical studies.

The profile is characterized by a translational focus to address unmet clinical needs. Output is centered around impacting clinical guidelines and innovations with a direct clinical implication.

\* healthcare professional includes medical specialists, physicians, nurses, psychologists, physiotherapists etc.

Examples of typical academic performance:

Improvement of clinical outcomes, contribution to clinical guidelines, contribution to local procedures, protocols and guidelines, contribution to national (healthcare) quality standards, clinical certifications. Assistant professor

**Clinical researcher** 

#### **Assistant professor**

#### Personal mission & vision 🤨

Mission and future plans for research and personal and team development.

#### Roles & responsibilities

Daily responsibility for UMC Utrecht clinical studies or 'local' part of larger studies, including, for example, patient communication and pre-registration of studies. Contributes to 1-3 clinical studies (clinical studies includes for example clinical trials, cohort studies, case studies and biobank studies). Assists staff, students and/or technicians. Is consulted by team members as an expert within the discipline. Receives external funding (research consortia, personal or other) or has arranged finances through internal support (all typically 50-250k or equivalent over past 3 years).

#### Leadership & team science

Reflects on team goals and individual roles and contributions, where personal and team success are balanced. Describes how teammembers are valued and rewarded.

#### Supervision & teaching

Supervises on average between 1-3 (PhD) students or other contributing staff. Creates an attractive environment for (PhD) students to learn. Is active in teaching (for detailed description see category 8 of academic performance).

#### Academic performance

Demonstrable impact on clinical healthcare, visible through clinically relevant publications, contribution to guidelines and/ or innovative protocols.

Quality indicators with emphasis on research and teaching in categories 1, 4, 7 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Scientific collaborations are of added value to the personal mission & vision. Patients and other stakeholders are involved in formulating research goals. Disseminates research findings to patients, stakeholders and/or the general public. Citizens, patients and/or other stakeholders are involved in research and/or formulating research goals.

#### Competences & development 🤨

Competence & personality profile supports career profile.

#### Associate professor

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Is responsible for (inter)national clinical studies. Has an (inter) national and institutional consultation role as an expert beyond the discipline. Receives external funding (personal, research consortia or other) or has arranged finances through internal support (all typically 250k or equivalent over past 5 years).

#### Leadership & team science

Aligns team goals with vision. Proven dedicated and sustainable team role. Actively contributes to the team by being involved in composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average 1-3 (PhD) students or other staff. Has successfully supervised on average between 1-3 PhD students. Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for process milestones see category 8 of academic performance).

#### Academic performance <sup>(i</sup>

Demonstrable impact on clinical healthcare, visible through clinically relevant publications, contribution to guidelines and/ or innovative protocols.

Quality indicators with emphasis on research and teaching in categories 1, 4, 7 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Scientific collaborations are of added value to the personal mission & vision. Involves patients and other stakeholders in formulating hypothesis, development of research plans, co-creation of research performance, implementation and/or dissemination of research output.

#### Competences & development

Competence & personality profile, including leadership skills, supports career profile.

**Clinical researcher** 

#### Full professor

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Leads (inter)national clinical studies and has an international consultation role. Initiates interdisciplinary research. Receives external funding (reseach consortia, personal or other) or has arranged finances through internal support to sustain research group (all typically >1M or equivalent over past 5 years).

#### Leadership & team science

Creates and shares vision with research team. Takes responsibility for team in composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average >3 post-docs, PhD students or other (advanced) staff. Has successfully supervised on average between 5-10 post-docs and/or PhD students. Is able to provide examples of successful careers of alumni.

Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for indicators see category 8 of academic performance).

#### Academic performance

Demonstrable impact on clinical healthcare, visible through clinically relevant publications, contribution to guidelines and/ or innovative protocols.

Quality indicators with emphasis on research and teaching in categories 1, 4, 7 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Scientific collaborations are of added value to the personal mission & vision. Involves patients and other stakeholders in formulating hypothesis, development of research plans, co-creation of research performance, implementation and/or dissemination of research output; engages in structural dialogue with patient organisations and/or other stakeholders.

#### Competences & development

Competence & personality profile, including leadership skills, supports career profile.

Assistant professor

**Clinical researcher** 

CLINICAL



The educator initiates, studies and implements research innovations and performs independent research on teaching methodologies. The profile is characterized by broad expertise over multiple fields in health professions education and strong communication skills inside and outside academia. Educational innovation, training and inspiring students are important outputs as well as leadership to drive social innovations.

Examples of typical academic performance:

Outcomes are (inter)nationally acknowledged insights on improved learning environments and teaching, innovation on learning and education methods and contents. Assistant professor

#### **Assistant professor**

#### Personal mission & vision 🤨

Mission and future plans for research & teaching and personal & team development.

#### Roles & responsibilities

Initiates advancement of teaching & learning at course level and ensures the continuous development in the field of teaching. Contributes to educational innovation, organisation or strategic projects. Coordination and management of expertise at course or discipline level, and committees relevant for teaching. Is consulted by team members as an expert within the discipline.

#### Leadership & team science

Reflects on team goals and individual roles and contributions, where personal and team success are balanced. Describes how teammembers are valued and rewarded.

#### Supervision & teaching

Supervises on average between 1-3 teaching and research assistants (students) or other contributing staff. Creates an attractive environment for (PhD) students to learn. Is active in teaching and qualified for the University Teaching Qualification Program (Basis Kwalificatie Onderwijs, BKO) (for detailed description see category 8 of academic performance).

#### Academic performance ୟ

Innovative educational approaches, including implementation and research. Outputs include education products for peers. Quality indicators with emphasis on research and teaching in categories 1, 4, 5, 6 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Professional collaborations are of added value to the personal mission & vision. Engages with stakeholders, including (PhD) students, about education and research goals, implementation and/or dissemination of output at a local level.

#### Competences & development

Competence & personality profile supports career profile.

Full professor

### Personal mission & vision

Mission and future plans for research & teaching and personal & team development.

#### **Roles & responsibilities**

Is responsible for (initiation of) educational innovation projects at faculty level. Has a national and institutional consultation role as an expert beyond the discipline. Contributes to innovational, organisational and/or strategic projects at university or national level and coordination/management of education at programme or department/division level.

#### Leadership & team science

Aligns team goals with vision. Proven dedicated and sustainable team role. Actively contributes to the team by being involved in composition, communication, infrastructure and recognition of different roles and outputs.

#### **Supervision & teaching**

Supervises on average 1-3 (PhD) students, research assistants or other contributing staff. Successfully supervised 1-3 research and teaching projects over the last five years. Is active and leading in teaching and at a senior level qualified for the University Teaching Qualification Program (Senior Kwalificatie Onderwijs, SKO) (for detailed description see category 8 of academic performance). Ensures continuous development in the field of teaching.

#### Academic performance

Innovative educational approaches, including implementation and research. Outputs include education products for peers. Quality indicators with emphasis on research and teaching in categories 1, 4, 5, 6 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Professional collaborations are of added value to the personal mission & vision. Involves stakeholders, including (PhD) students, in development of educational innovation and research. The profile is characterized by implementation and dissemination of academic output.

#### Competences & development (

Competence & personality profile, including leadership skills, supports career profile.

**Assistant professor** 

**CLINICAL** 

**Associate professor** 

**Assistant professor** 

#### **Full professor**

#### Personal mission & vision

Mission and future plans for research & teaching and personal & team development.

#### **Roles & responsibilities**

Initiates and leads educational innovation, organisational and strategic projects at the (inter)national level. Is responsible for coordination and management of education at the faculty/ university level. Has a focus on interdisciplinary research.

#### Leadership & team science

Creates and shares vision with research team. Takes responsibility for team in: composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average >3 post-docs, PhD students or other (advanced) staff. Has successfully supervised on average between 5-10 post-docs and/or PhD students. Is able to provide examples of successful careers of alumni.

Is active and leading in teaching and qualified for Senior Teaching Qualification (SKO) and follows advanced teacher development programmes to ensure continuous development in the field of teaching (for indicators see category 8 of academic performance).

#### Academic performance

Innovative educational approaches, including implementation and research. Outputs include education products for peers. Quality indicators with emphasis on research and teaching in categories 1, 4, 5, 6 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Involves stakeholders, including (PhD)students, in development of educational innovation and research: development of plans, co-creation of educational innovation and research performance, evaluation, implementation/ dissemination of output; engages in structural dialogue with stakeholders at a national and international level.

#### **Competences & development**

Competence & personality profile, including leadership skills, supports career profile.

# Exploratory researcher

The researcher contributes specific knowledge or expertise to address fundamental, translational or clinical questions in the field and is mainly curiosity-driven in the context of UMC Utrecht research strategy. The profile is characterized by a strong track record of innovations or break-through discoveries and by acquiring external funding in both individual and collaborative projects.

Output and other publications are aimed at academic and (inter)national audiences as well as the general public.

Examples of typical academic performance:

(Open Access) publications and other internationally recognized contributions to the field, aimed at increasing the knowledge reservoir. Public engagement focuses on the general public. Full professor

**Associate professor** 

**Assistant professor** 

Exploratory researcher



Mission and future plans for research and personal and team development.

#### Roles & responsibilities

Performs high quality, responsible research in a healthcare context with the aim of acquiring a fundamental understanding of disease and/or improving health in the long term through epidemiological, conceptual or technological innovations. The researcher creates a track record of unique intellectual, internationally recognized contributions to the field.

Receives external funding (research consortia, personal or other) or has arranged finances through internal support (all typically 50-250k or equivalent over past 3 years).

#### Leadership & team science

Reflects on team goals and individual roles and contributions, where personal and team success are balanced. Describes how teammembers are valued and rewarded.

#### Supervision & teaching

Supervises BSc/MSc and/or PhD students, and is consulted by team members. Creates an attractive learning environment for students. Is active in teaching (for detailed description see category 8 of academic performance).

#### Academic performance

Demonstrable impact on the broader scientific field, for example through publications that demonstrate potential to generate knowledge- or technology-based innovations or break-through discoveries.

Quality indicators with emphasis on research and teaching in categories 1, 2, 3, 4 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

(Inter)national scientific collaborations are of added value to the mission and vision. Involves relevant stakeholders to promote translation to the clinic. Is able to communicate science to a wider or lay public with emphasis on how the science fits into the larger disease/health context.

### Competences & development

Competence & personality profile supports career profile.

#### Associate professor

**Assistant professor** 

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Performs high quality, responsible research in a healthcare context with the aim of acquiring a fundamental understanding of disease and/or improving health in the long term through epidemiological, conceptual or technological innovations. The researcher creates a track record of unique intellectual, internationally recognized contributions to the field.

Receives funding from research consortia and/or personal grants (typically >500k over the last 5 years).

#### Leadership & team science

Builds up a recognisable sub-team. Aligns team goals with vision. Proven dedicated and sustainable team role. Actively contributes to the team by being involved in composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average >3 PhD students and advanced supporting staff. Has successfully supervised on average between 1-3 PhD students. Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for process milestones see category 8 of academic performance).

#### Academic performance

Demonstrable impact on the broader scientific field, for example through publications that demonstrate potential to generate knowledge- or technology-based innovations or break-through discoveries.

Quality indicators with emphasis on research and teaching in categories 1, 2, 3, 4 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

(Inter)national collaborations are organized in scientific consortia that are of added value to the mission and vision. Involves relevant stakeholders and patient organizations to promote translation to the clinic. Is able to communicate science to a wider or lay public with emphasis on how the science fits into the larger disease/health context.

#### Competences & development

Competence & personality profile, including leadership skills, supports career profile.

#### **Full professor**

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Performs high quality, responsible research in a healthcare context with the aim of acquiring a fundamental understanding of disease and/or improving health in the long term through epidemiological, conceptual or technological innovations. The researcher builds a financially sustainable research group, creating a track record of unique intellectual, internationally recognized contributions to the field. Initiates funding from research consortia and/or personal grants (typically >1M over the last 5 years).

#### Leadership & team science

Creates and shares vision with research team. Takes responsibility for team in: composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average >3 post-docs, PhD students or other (advanced) staff. Has successfully supervised on average between 5-10 post-docs and/or PhD students. Is able to provide examples of successful careers of alumni.

Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for indicators see category 8 of academic performance).

#### Academic performance

Demonstrable impact on the broader scientific field, for example through publications that demonstrate potential to generate knowledge- or technology-based innovations or break-through discoveries.

Quality indicators with emphasis on research and teaching in categories 1, 2, 3, 4 & 8 from the list of suggested indicators.

#### Collaborations, stakeholders & public engagement

Leads (inter)national collaborations that are organized in scientific consortia that are of added value to the mission and vision. Involves relevant stakeholders and patient organizations to promote translation to the clinic. Is able to communicate science to a wider or lay public with emphasis on how the science fits into the larger disease/health context.

#### **Competences & development**

Competence & personality profile, including leadership skills, supports career profile.

Associate

**Assistant professor** 

# **W** Implementation researcher

The researcher systematically studies methods that support the application of research findings and other evidence-based knowledge into policy and practice. The intent of this profile is to understand what, why, and how interventions work in "real world" settings and to test approaches to improve implementation in practice. Collaborations are key with the aim to understand real world conditions.

Output is dedicated around outcome assessments of interventions, evidence-based practices, implementation strategies and learning healthcare.

> **Examples of typical** academic performance:

Oriented around implementation toolboxes and policy reports, cost-effectiveness analyses and output relevant to stakeholders and patients.

Assistant professor

Full professor

#### **Assistant professor**

#### Personal mission & vision 🤨

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Collaborates in designing implementation research activities and performs outcome assessments of interventions, evidence-based practices, implementation strategies and learning healthcare. Receives external funding or internal support (typically between 50-250k over the last 3 years).

#### Leadership & team science

Reflects on team goals and individual roles and contributions, where personal and team success are balanced. Describes how teammembers are valued and rewarded.

#### Supervision & teaching

Supervises on average 1-3 (PhD) students or other contributing staff, and is consulted by team members. Creates an attractive learning environment for students. Is active in teaching (for detailed description see category 8 of academic performance).

#### Academic performance

Demonstrable focus on implementation of research results, for example by implementation toolboxes and policy reports, cost-effectiveness analyses and output relevant to stakeholders and patients.

Quality indicators with emphasis on research and teaching in categories 1, 4, 5, 6 & 8 from the list of suggested indicators.

### & public engagement

Stakeholder involvement is crucial for successful knowledge implementation as well as strong integration of patient preferences. Is able to engage and communicate science to a wider or lay public.

#### Competences & development

Competence & personality profile supports career profile.

Full professor

#### Associate professor

**Assistant professor** 

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Initiates and promotes collaborations across implementation research activities such as implementation strategy development and testing, observational studies of real-world implementation, hybrid effectiveness-implementation trials and the evaluation of implementation guides. Develops implementation research tools. Receives external funding (research consortia, personal or other) or has arranged finances through internal support (all typically >500k or equivalent over past 5 years).

#### Leadership & team science

Creates and shares vision, including aligned team goals, with the team. Actively contributes to the team by being involved in composition, communication, infrastructure and recognition of different roles and outputs.

#### Competences & development

Competence & personality profile, including leadership skills, supports career profile.

#### Supervision & teaching

Supervises on average >3 PhD students and advanced supporting staff. Has successfully supervised on average between 1-3 PhD students. Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for process milestones, see category 8 of academic performance).

#### Academic performance

Demonstrable focus on implementation of research results, for example by implementation toolboxes and policy reports, cost-effectiveness analyses and output relevant to stakeholders and patients.

Quality indicators with emphasis on research and teaching in categories 1, 4, 5, 6 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Has multidisciplinary collaboration to reach implementation goals. Stakeholder involvement is crucial for successful knowledge implementation as well as strong integration of patient preferences. Is able to engage and communicate science to a wider or lay public.

#### **Full professor**

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Initiates and performs scientific studies of methods and strategies that facilitate the uptake of evidence-based practice and research into regular care. Acquires funding for a financially sustainable implementation research group.

Receives external funding (reseach consortia, personal or other) or has arranged finances through internal support to sustain research group (all typically >1M or equivalent over past 5 years).

#### Leadership & team science

Creates and shares vision with research team. Takes responsibility for team in: composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average >3 post-docs, PhD students or other (advanced) staff. Has successfully supervised on average between 5-10 post-docs and/or PhD students. Is able to provide examples of successful careers of alumni. Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for indicators see category 8 of academic performance).

#### Academic performance

Demonstrable focus on implementation of research results, for example by implementation toolboxes and policy reports, cost-effectiveness analyses and output relevant to stakeholders and patients.

Quality indicators with emphasis on research and teaching in categories 1, 4, 5, 6 & 8 from the list of suggested indicators.

#### **Collaborations**, stakeholders & public engagement

Has multidisciplinary collaboration to reach implementation goals. Stakeholder involvement is crucial for successful knowledge implementation as well as strong integration of patient preferences. Is able to engage and communicate science to a wider or lay public.

#### **Competences & development**

Competence & personality profile, including leadership skills, supports career profile.

**Assistant professor** 

## Methodology-Technology researcher

The researcher enables research advancement in the UMC Utrecht and beyond by having the expertise to innovate our facilities with advanced technology, methodology and equipment.

This profile is characterized by this specific expertise in order to promote collaborations and research success of multiple groups. Output indicators are successes achieved together with collaborators and innovations in methodology and technology.

Full professor

**Assistant professor** 

**Examples of typical** academic performance: Outputs are essential for key research infrastructures,

technologies and methodologies.

#### **Assistant professor**

#### Personal mission & vision 🤨

Mission and future plans for research and personal and team development.

#### Roles & responsibilities

Has a key role in development and sustaining of research programs, contributes to earning capacity and dissemination in a partnering role. Expert within discipline. Responsible for sustainability of infrastructures, methodologies and technologies.

#### \_eadership & team science

Contributes to multiple research lines with specific expertise. Reflects on team goals and individual roles and contributions, where personal and team success are balanced.

#### Supervision & teaching

Has a shared and crucial responsibility for scientific quality of methodology and technology in supervision of (PhD) students, technicians and staff in Utrecht.

Is active in teaching (for detailed description see category 8 of academic performance).

#### Academic performance 🥊

Evidence of crucial supportive and consultative role for infrastructure and/or methology is presented. Quality indicators with emphasis on research and teaching in categories 1, 2, 4, 7 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Has multidisciplinary collaborations within the institution. Has relevant stakeholder relations for sustainability of infrastructures, methodologies and technologies. Is able to engage and communicate research to a professional public.

#### Competences & development

Competence & personality profile, including collaborative skills, supports career profile.

#### Associate professor

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Has a key role in development and sustaining of research programs, contributes to earning capacity and dissemination in a partnering role. Responsible for innovation of infrastructures, methodologies and technologies.

#### Leadership & team science

Aligns team goals with vision. Proven dedicated and sustainable team role. Actively contributes to the team by being involved in composition, communication, infrastructure and recognition of different roles and outputs. Contributes to multiple research lines with specific expertise.

#### Supervision & teaching

Has a shared and crucial responsibility for scientific quality of methodology and technology in supervision of (PhD) students, technicians and (advanced) staff at a national level. Is active in teaching and qualified for in the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for process milestones see category 8 of academic performance).

#### Academic performance <sup>(i</sup>

Evidence of crucial supportive and consultative role for infrastructure and/or methology is presented. Quality indicators with emphasis on research and teaching in categories 1, 2, 4, 7 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Has multidisciplinary collaborations on the (inter)national level. Has relevant stakeholder relations for sustainability of infrastructures, methodologies and technologies. Is able to engage and communicate research to a professional public.

#### Competences & development

Competence & personality profile, including collaborative skills, supports career profile.

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#### **Full professor**

#### Personal mission & vision

Mission and future plans for research and personal and team development.

#### **Roles & responsibilities**

Leads the innovation, development and sustainability of infrastructures, methodologies and technologies to sustain research programs. The candidate has an (inter)national consultation role. Facilitates interdisciplinary research and has a broad (inter)national network. Contributes to earning capacity and dissemination in a partnering role to multiple research lines. Acquires funding for a financially sustainable methodology and/or technology-based research group. Receives external funding (research consortia, personal or other) or has arranged finances through internal support to sustain research group (all typically >1M or equivalent over past 5 years).

#### Leadership & team science

Creates and shares vision with research team. Takes responsibility for team in composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average >3 post-docs, PhD students or other

(advanced) staff. Has successfully supervised on average between 5-10 post-docs and/or PhD students. Is able to provide examples of successful careers of alumni. Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO, for indicators see category 8 of academic performance).

#### Academic performance

Demonstrable impact on infrastructure and/or methodology is presented, capable to innovate and rapidly implement and adapt novel methods and technologies. Quality indicators with emphasis on research and teaching in categories 1, 2, 4, 7 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Has multidisciplinary collaborations on the (inter)national level. Has relevant stakeholder relations for sustainability of infrastructures, methodologies and technologies. Is able to engage and communicate research to a professional public.

#### Competences & development

Competence & personality profile, including leadership skills, supports career profile.

T researcher

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**EXPLORATORY** 

This researcher initiates and supports medical innovations that have a strong focus on public private partnerships aimed to utilize the results in society at large.

Private partnerships and collaborations inspire beyond state-of-the-art research to maintain or become front runner in medical science. Open-source access to tooling and data is used to accelerate innovation and IP may be protected to help and stimulate science-based spin off companies.

Examples of typical academic performance:

Centered around technology uptake, which can imply patents, Intellectual Property, spin offs, public-private collaborations, but also open source routes. Assistant professor

#### **Assistant professor**

#### Personal mission & vision 🤨

Mission and future plans for research and personal and team development.

#### Roles & responsibilities

Maintains existing contacts with private partners. Understands Intellectual Property policies. The researcher is seen as an expert within the discipline on an institutional and national level. Has arranged funding for applied research or public-private collaboration or has arranged finances through internal support (typically between 50-250k over the last 3 years).

#### Leadership & team science

Leads a small and productive team and is consulted by team members. Reflects on team goals and individual roles and contributions, where personal and team success are balanced. Describes how teammembers are valued and rewarded.

#### **Supervision & teaching**

Supervises on average 1-3 (PhD) students or other contributing staff, and is consulted by team members. Creates an attractive learning environment for students. Is active in teaching (for detailed description see category 8 of academic performance).

#### Academic performance 🥊

M & T

Is centered around technology uptake or utilization. Quality indicators with emphasis on research and teaching in categories 1, 4, 5 & 8 from *the list of suggested indicators*.

### Collaborations, stakeholders & public engagement

Is involved in public-private collaborations that contribute to the mission and vision. Stakeholder involvement is centered around end-users. Is able to engage and communicate research to a professional public and end-users.

#### Competences & development

Competence & personality profile supports career profile.

**Assistant professor** 

#### Personal mission & vision

The researcher describes his/her personal research mission and it's relation to UMC Utrecht strategy.

#### **Roles & responsibilities**

Initiates and maintains public-private partnerships. Has a (inter) national consultation role as an expert beyond the discipline. Is involved in and has an understanding of consortium agreements, specifically Intellectual Property. Has arranged funding to maintain a regular and sustainable group on based public-private partnerships (typically >500k or equivalent over past 5 years).

#### Leadership & team science

Builds up a recognisable sub-team. Aligns team goals with vision. Actively contributes to the team by being involved in composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average 1-3 PhD students and advanced supporting staff. Has successfully supervised on average between 1-3 PhD students. Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for process milestones see category 8 of academic performance).

#### Academic performance <sup>i</sup>

Is centered around technology uptake or utilization. Quality indicators with emphasis on research and teaching in categories 1, 4, 5 & 8 from the *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Initiates and maintains private-public collaborations that contribute to the mission and vision. Stakeholder involvement is centered around end-users. Is able to engage and communicate research to a professional public and endusers.

#### Competences & development

Competence & personality profile, including leadership skills, supports career profile.

**CLINICAL** 

M & T

#### Full professor

#### Personal mission & vision

The researcher describes his/her personal research mission and it's relation to UMC Utrecht strategy.

#### **Roles & responsibilities**

Coordinates and initiates multiple public-private partnerships. Has a (inter)national consultation role as an expert beyond the discipline. Uses industrial partners for upscaling of innovations. Leads the formulation of consortium agreements. Is able to show international utilization in research and clinic of team innovations. Spin-out success (typically >1M yearly over the last 5 years).

#### Leadership & team science

Creates and shares vision with research team. Takes responsibility for team in: composition, communication, infrastructure and recognition of different roles and outputs.

#### Supervision & teaching

Supervises on average >3 post-docs, PhD students or other (advanced) staff. Has successfully supervised on average between 5-10 post-docs and/or PhD students. Is able to provide examples of successful careers of alumni. Is active in teaching and qualified for the University Teaching Qualification Program (Klinisch or Basis Kwalificatie Onderwijs, KKO/BKO) (for indicators see category 8 of academic performance).

#### Academic performance

Is centered around technology uptake or utilization. Quality indicators with emphasis on research and teaching in categories 1, 4, 5 & 8 from *the list of suggested indicators*.

#### Collaborations, stakeholders & public engagement

Coordinates and maintains multiple private-public collaborations that contribute to the mission and vision. Stakeholder involvement is centered around user committees, patient councils and other end-users. Is able to communicate the relevance of research performed in public-private partnerships research to a wider and lay public.

#### **Competences & development**

Competence & personality profile, including leadership skills, supports career profile.

**Assistant professor** 

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CLINICAL

# List of suggested indicators

\* The overview of research quality indicators should be selective, not exhaustive, and be limited to the past 5 years (it is ostensibly NOT a complete overview of all results and activities). \* Selected publications should be contextualized: explain the importance of the publication/selected research performance indicator for the field and describe the personal contribution to the research (max. 100 words per publication).

\* If not obvious, the relevance of other selected research quality indicators to mission and vision is also explained.

\* Teaching (category 8) is obligatory for all profiles and levels. For each of the other 7 indicator categories, assistant professors should describe maximally 3 outputs; associate professors maximally 5; full professors maximally 10.

	Clinical researcher	Academic Educator	Implementation researcher	Exploratory Researcher		Valorisation research
1. Research products for peers (indicate openness/availability where	Clinical researcher		implementation researcher	Exploratory Researcher	warresearcher	valorisation research
applicable)						
2. Use of research products by peers						
3. Marks of recognition by peers						
4. Research products for societal target groups (indicate						
openness/availability where applicable)						
5. Use of research products by societal target groups						
6. Marks of recognition from societal target groups						
7. Process milestones in (setting up) research						
1. Research products for peers (indicate openness/availability where						
applicable)						
Journal articles and reviews (refereed/non-refereed), specifically Open						
Access publications						
Books, source publications and exhibition catalogues						
(refereed/nonrefereed), , specifically Open Access publications						
Book chapter (refereed/non-refereed), specifically Open Access						
publications						
Editorship of volumes and special issues (refereed/non-refereed)						
Digital infrastructures and databases						
Presentations and conference proceedings (refereed/non-refereed)						
Designs						
Data sets and software, specifically FAIR data & code						
2. Use of research products by peers						
Reviews						
Use of data sets, software and facilities						
Citations of articles, books and other products						
3. Marks of recognition by peers						
Research grants awarded to individuals (including reflection on funding						
applications, both accepted and rejected)						
Grants awarded to major collaborative research projects						
Grants awarded to individuals or collaborative research projects						
Prizes awarded to individuals or collaborative research projects						
Secondary appointments and membership of scientific councils or						
committees						
Editorships, council memberships, organisation of conferences and						
scientific meetings						

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#### 4. Research products for societal target groups (indicate openness/availability where applicable) Books, source publications, guidelines, and catalogues for a professional readerships Clinical knowledge- and experticecenters (inter)nationally Patents and licences Films, documentaries and exhibitions for a professional audience Websites for professional visitors Book chapters in publications for a general readership Software, digital media and serious games for general users Lectures, masterclasses and conferences for a general audience Blogs and forums for general readers

#### 5. Use of research products by societal target groups

Projects in cooperation with societal parties Contract research Use in education References in professional and public domains

#### 6. Marks of recognition from societal target groups

Financial and material support by society Membership of civil-society organisations Secondary appointments within civil society organisations Public prizes

#### 7. Process milestones in (setting up) research

Contribution to trial design, i.e. research protocol, preregistration Setting up collaborations & data infrastructure(s) Obtaining legal and ethical permission, i.e. METC submission Monitoring and subsequent follow up of trial Pre-registration of research (animal, clinical) Mentoring, supervision and talent management

#### 8. Teaching indicators

Past teaching performance (Global duration, quantity, quality and target groups: bachelor, master, PhD, postgraduate trainees or other) Professional development (being an expert in the research field and a didactic expert) Design teaching methods (examples of newly developed teaching programs or methods, e.g. a course) Performing teaching and creating an attractive learning environment (examples of lectures/courses) Evaluating students and teaching methods (capable of providing feedback to students, colleagues and evaluating teaching methods)

Scholarship in teaching (i.e. personal vision on teaching and learning in healthcare)