



## Job Description and Selection Criteria

<b>Post</b>	<b>Professor of Genomics and Global Health</b>
<b>Department/Faculty</b>	<b>Nuffield Department of Clinical Medicine</b>
<b>Division</b>	<b>Medical Sciences</b>
<b>College</b>	<b>St John's</b>

### Overview of the post

The Professorship of Genomics and Global Health will provide a leadership role for the post-holder who will have an opportunity not only to forge an independent research programme within a well-founded laboratory, based within the Nuffield Department of Clinical Medicine, but also to contribute more broadly to the collegiate university through the Medical Sciences Division and St John's College. Oxford is one of the leading UK centres for many areas of academic research in Genomics and Global Health and related fields.

This is a clinical post; the professor must be medically qualified and will be expected to hold an honorary consultant contract with Oxford University Hospitals NHS Trust.

Queries about the post should be addressed to Professor Peter Ratcliffe FRS, Head of Department at [pjr@well.ox.ac.uk](mailto:pjr@well.ox.ac.uk).

All enquiries will be treated in strict confidence; they will not form part of the selection decision.

The University of Oxford is a member of the Athena SWAN Charter to promote women in Science, Engineering, Technology and Medicine. The University holds an Athena SWAN bronze award at institutional level. Contact [equality@admin.ox.ac.uk](mailto:equality@admin.ox.ac.uk) for further information about Athena SWAN at the University of Oxford.

### Duties of the post

The Professor of Genomics and Global Health will be a member of both the University and the College community. He or she will be part of a lively and intellectually stimulating research community which performs to the highest international levels in research and publications and will have access to the excellent research facilities which Oxford offers. He or she will have a role to play in the running of the College as a member and trustee of its Governing Body.

The main duties of the post are as follows.

#### *Leadership role*

The Professor will:

- Provide scientific leadership in genomic epidemiology, with particular attention to diseases that have a major global impact and disproportionately affect people living in poor countries;
- Provide strategic leadership in translating genome research into practical applications that will improve health in the developing world;
- Develop global research partnerships that enable sharing of genomic and epidemiological data between investigators in rich and poor countries.

The appointee will play a leading role in driving forward Oxford's existing programme of translational research on genomics and global health.

#### *Research activities*

The appointee will develop a programme of research activities with some or all of the following components:

- Internationally leading research on the clinical and biological consequences of genome variation in human and/or pathogen populations;
- Development of new technologies and/or analytical methods for large-scale genomic epidemiology;
- Development of web-based software and databases to provide tools and resources for global sharing and dissemination of data on the genomic epidemiology of infectious disease;
- Development of ethical policies and procedures for genomic epidemiology and/or global data-sharing networks, in consultation with researchers and institutions in developing countries.

#### *Teaching, training and capacity-building activities*

The appointee will contribute to teaching, training and capacity building in genomic epidemiology and global health research, both within the University and through global research networks. This will include some or all of the following components:

- Teaching on established University courses, e.g. the MSc in Global Health Sciences;
- Research supervision for DPhil students. There are existing Wellcome-funded doctoral programmes at Oxford in the areas of (1) Genomic Medicine and Statistics; (2) Infection, Immunology and Translational Medicine; and (3) Genomics and Global Health;
- Organisation of a doctoral training scheme in genomics and global health, aimed primarily at researchers working in developing countries;
- Organisation of training workshops in genomic epidemiology aimed primarily at researchers working in developing countries;

- Organisation of advanced training workshops in new technologies and analytical methods in genomic epidemiology, aimed primarily at postdoctoral researchers and independent investigators;
- Organisation of a scheme for capacity building in genomic epidemiology of infectious disease, with bursary and/or fellowship funding for researchers in developing countries.

## Selection criteria

Applications will be judged only against the criteria which are set out below. Applicants should make sure that their application shows very clearly how they believe that their skills and experience meet these criteria.

Oxford is committed to fairness, consistency and transparency in selection decisions, and unsuccessful applicants may request feedback against the published selection criteria for the specific post. (We are, however, unable to provide general advice about the suitability of applicants' cvs for future vacancies in Oxford or elsewhere.) Chairs of selection committees (known as electoral boards) will be aware of the principles of equality of opportunity and fair selection and there will be a member of each gender wherever possible.

The successful candidate:

### *Essential*

- will have a proven track record as a first class internationally-recognised researcher in genomics and global health, with evidence of well-cited original publications in high-impact journals.;
- will have secured substantial independent research funding;
- will already lead a major research group. Duties will include responsibility for all aspects of the appointment, supervision, and management of the staff in the team; deciding on skill mix and setting appropriate personal development and training plans;
- will have the potential to develop productive interactions with other scientists at the University of Oxford;
- will have a demonstrable expertise and interest in teaching;
- will have interests that are synergistic with the existing strengths of the department;
- will be an experienced practising clinician at NHS consultant/honorary consultant level.

### *Desirable*

- will have led a research group with overseas components.

## How to apply

There is no application form. Applications must include:

- your full contact details including email and full postal addresses, and a telephone number
- a covering letter or statement explaining how you meet the criteria set out above
- a full CV and publications list

- an indication of where you first heard about this post
- the names and contact details (postal and e-mail addresses and telephone number) of precisely **three** referees.

You should contact all three of your referees before applying, to ensure they are aware of your application and of the requirements for the post, and to ensure that they would be content to write a reference for you for this post, if they were asked to do so.

The University will assume that it is free to approach your referees at any stage unless your application specifies otherwise. Therefore if you would prefer a referee or referees to be approached only with your specific permission or if you would prefer them to be approached only if you are being called for interview on the final short list, then you must state this in your application, alongside the details of the relevant referee(s). You should provide the names and full contact details of three referees even if you do not wish them to be contacted yet.

If you are shortlisted but only Oxford references are available for you, you will be asked at a later stage to provide the name of an additional referee outside Oxford.

Applications should be sent by email to Dr Gwen Booth, Personnel Officer, Senior Appointments at [professorships@admin.ox.ac.uk](mailto:professorships@admin.ox.ac.uk).

The deadline for applications is **Monday 26 March 2012**.

Should you have any queries about how to apply, please contact Mrs Elaine Eastgate at [professorships@admin.ox.ac.uk](mailto:professorships@admin.ox.ac.uk) or telephone: +44 (0) 1865 280189.

The full membership of the board of electors will be published in the University Gazette (<http://www.ox.ac.uk/gazette/>) when it is finalised. All applications will be acknowledged after receipt and will be considered by the board of electors as soon as possible after the closing date. The board is free to search for other candidates at this or any subsequent stage in its proceedings. All shortlisted candidates will be interviewed and will be asked to give a short presentation to the electors as part of the interview. The board's decision will be communicated as soon as possible after the interview but in some cases there may be a delay while deliberations are ongoing.

# Essential Information for Applicants for the Professorship of Genomics and Global Health

## The University

The University of Oxford aims to sustain excellence in every area of its teaching and research, and to maintain and develop its position as a leader amongst world-class universities. Placing an equally high value on research and on teaching, the colleges, departments and faculties of Oxford aspire both to lead the international research agenda and to offer a unique and exceptional education to our undergraduate and graduate students.

Oxford's self-governing community of scholars includes university professors, readers, and lecturers, college tutors, senior and junior research fellows and over 2,500 other university research staff. The University aims to provide facilities and support for colleagues to pursue innovative research and outstanding teaching, by responding to developments in the intellectual environment and society at large, and by forging close links with the wider academic world, the professions, industry and commerce. The Strategic Plan, detailing strategy for the period 2008-12, can be found at <http://www.admin.ox.ac.uk/prs/planningcycle/stratplan.shtml>.

Research at Oxford combines disciplinary depth with an increasing focus on inter-disciplinary and multi-disciplinary activities addressing a rich and diverse range of issues, from deciphering ancient texts and inscriptions using modern scientific and computational methods developed in Oxford, through to global health, climate change, ageing, energy and the effects on our world of rapid technological change.

Oxford seeks to admit undergraduate students with the intellectual potential to benefit fully from the college tutorial system and small group learning to which Oxford is deeply committed. Meeting in small groups with their tutor, undergraduates are exposed to rigorous scholarly challenge and learn to develop their critical thinking, their ability to articulate their views with clarity, and their personal and intellectual confidence. They receive a high level of personal attention from leading academics.

Oxford has a strong postgraduate student body which now numbers about 7,000, well over a third of the full-time students. Postgraduates are attracted to Oxford by the international standing of the faculty, by the rigorous intellectual training on offer, by the excellent research and laboratory facilities available, and by the resources of the museums and libraries, including one of the world's greatest libraries, the Bodleian.

For more information please visit [www.ox.ac.uk](http://www.ox.ac.uk)

## The Medical Sciences Division

The Professorship is attached to the Nuffield Department of Clinical Medicine. This Department is part of the Division of Medical Sciences, which also includes all the clinical departments of the Medical School and also the Departments of Biochemistry and of Experimental Psychology and the pre-clinical departments of the Medical School (the Departments of Physiology, Anatomy and Genetics; Pharmacology; and the Sir William Dunn School of Pathology) (see <http://www.medsci.ox.ac.uk/>). The Division is one of the major centres for clinical and basic biomedical research in Europe, with more than 2,200 staff on the payroll and 800 postgraduate students. It achieved first or second place nationally in seven units of assessment in the 2008 national Research Assessment Exercise. The annual grant income from external sources for the Medical Sciences Division is over £165 million.

The Division fosters the highest possible standards in research, teaching and patient care and seeks to recruit staff who share this vision.

## The Nuffield Department of Clinical Medicine

The Nuffield Department of Clinical Medicine is led by Professor Peter Ratcliffe and is one of 15 clinical academic departments within the University. It undertakes clinical work and substantial teaching, training and research. The department is 5\* rated with an annual turnover in excess of £130m. The department contributes to the teaching of 320 medical students in the Clinical School and provides one third of the clinical support of acute general medicine in the Oxford Radcliffe NHS Trust. Clinicians work in the John Radcliffe Hospital and the Churchill Hospital.

Biomedical research in Oxford is characterised by its range, depth, multidisciplinary approach and integration. The Department runs one of the largest externally-funded biomedical research programmes in the country, with approximately £100m per annum in externally funded research income. We have a growing cadre of postgraduate research students who contribute to the research endeavour and from whom we hope to encourage our future Principal Investigators. The Department comprises about 900 people from many countries and it has units in Thailand, Vietnam and Kenya and groups in other countries including The Gambia and South Africa.

The Department is integrated scientifically and driven by the scientific collaborations which change and flex according to the research work under consideration. There is considerable autonomy within the parts of the Department and some units are collaborative activities with other funders such as Cancer Research UK (CRUK) or the Medical Research Council (MRC). NHS colleagues also collaborate with the department for research purposes in addition to their clinical duties.

### **Genomics & Global Health at Oxford**

Oxford University is a world-leading centre both for genome science and for global health research, and has established a strong programme of translational research in genomics and global health.

Major programmes of research in genetics and genomics are established in several University departments, including the Nuffield Department of Clinical Medicine, the Department of Physiology, Anatomy & Genetics, the Dunn School of Pathology, the Department of Zoology and the Department of Statistics. The University also houses a number of leading research institutes in this field, including the Wellcome Trust Centre for Human Genetics (WTCHG), the MRC Functional Genomics Unit, and the Weatherall Institute for Molecular Medicine.

WTCHG is particularly strong in genomic epidemiology, statistic genetics and population genetics, areas which are of direct relevance to the Professorship of Genomics and Global Health. Faculty members at WTCHG and in the Department of Statistics have played a leading role in a number of landmark studies of human genome variation and genome-wide association studies including the International HapMap Project, the Wellcome Trust Case Control Consortium and the 1000 Genomes Project.

The Nuffield Department of Clinical Medicine serves as the academic base for three of the Wellcome Trust's Major Overseas Programmes: the KEMRI-Wellcome Trust Research Programme in Kenya; Mahidol-Oxford Research Unit in Thailand; and Oxford University Clinical Research Unit in Vietnam. Administrative support for these programmes, and for associated research groups in Laos, Tanzania, Indonesia and Nepal, is provided by the Wellcome Trust Centre for Research in Clinical Tropical Medicine, which is situated within

the grounds of the Churchill Hospital at the University's Centre for Clinical Vaccinology and Tropical Medicine.

The University has a leading programme of epidemiological and laboratory-based research on infectious disease, with a major emphasis on diseases affecting the developing world. This is based across a number of departments and institutes including the Nuffield Department of Clinical Medicine, the Dunn School of Pathology, the Department of Zoology, the Department of Primary Care Health Sciences, the Department of Public Health, the Department of Paediatrics, the Weatherall Institute of Molecular Medicine, the Peter Medawar Building for Pathogen Research, the Oxford Centre for Gene Function, the Jenner Institute, and WTCHG. There are several research programmes in infectious disease that span across different departments and institutes. An example is the Modernising Medical Microbiology Consortium, an initiative in the genomic epidemiology of infectious disease, which brings research groups in the Oxford Centre for Gene Function, WTCHG and the Biomedical Research Centre at Oxford Radcliffe Hospital.

Oxford is internationally renowned for its extensive and highly productive portfolio of research on malaria. Clinical and epidemiological research on malaria is a major focus of the Wellcome Trust Major Overseas Programmes in Kenya and Thailand, and there is a large body of laboratory research on malaria at the Kenya and Thailand Units, the Jenner Institute, the Weatherall Institute for Molecular Medicine and WTCHG. Oxford serves as the coordinating centre for a number of global research networks on malaria: the Malaria Atlas Project ([www.map.ox.ac.uk](http://www.map.ox.ac.uk)), the Worldwide Antimalarial Resistance Network (WWARN <http://www.wwarn.org/>), and the Malaria Genomic Epidemiology Network (MalariaGEN, [www.malariagen.net](http://www.malariagen.net)).

Key groupings noted in some of the above include those based at the Jenner Institute (<http://webdev.jenner.ac.uk/>) including Professor Adrian Hill and Dr Helen McShane. Plus other internationally renowned groups such as that of Professor Sarah Rowland Jones, and Professor Andrew McMichael at the Weatherall Institute of Molecular Medicine.

The MRC Centre for Genomics and Global Health (CGGH) was established in 2008 as a joint research programme of Oxford University and the Wellcome Trust Sanger Institute in Hinxton, near Cambridge. CGGH has research labs both at Oxford University and the Sanger Institute, and the current Director of CGGH (Professor Dominic Kwiatkowski) holds a joint appointment at both institutions. CGGH's administrative base is at WTCHG in Oxford which, as noted above, has a number of faculty with world-leading expertise in genomic epidemiology and statistical genetics. The Sanger Institute is Europe's largest genome research centre, responsible for a large part of the human genome project and many pathogen genome projects.

The goal of CGGH is to translate advances in genome science into practical applications that will help to reduce the burden of infectious disease in the developing world. Researchers funded by CGGH work at the Wellcome Trust Major Overseas Programmes in Thailand, Vietnam and Kenya, and at the MRC Laboratories in The Gambia, as well as at Oxford University and the Sanger Institute. A large part of its current work is to develop web-based informatic tools and resources that encourage and enable the sharing and dissemination of genomic epidemiology data by different research groups around the world. As an example of how CGGH is focusing its efforts, one specific aim is to inform public health policy by tracking the emergence and spread of antimalarial drug resistance. Although there is a major focus on malaria, the methods and tools that CGGH is developing also have applications for other infectious diseases, e.g. they are also being used for research on tuberculosis, enteric bacteria and influenza.

The work of CGGH is closely linked to that of MalariaGEN, a network of malaria researchers in 21 countries that is coordinated at Oxford University and the Sanger Institute. It was established in 2005 as part of the Grand Challenges in Global Health initiative and has recently received a Wellcome Trust Strategic Award to continue for a further 5 years. MalariaGEN's research portfolio includes trans-ethnic genome-wide association studies of human resistance to malaria, and large-scale next-generation sequencing studies to characterise genome variation, population structure and evolutionary selection in of *Plasmodium* parasites and *Anopheles* mosquitoes sampled from different locations around the world. MalariaGEN has been instrumental in developing policies for data-sharing between research partners in rich and poor countries, and in developing capacity for genomic and genetic data analysis by means of data fellowships and data bursaries for researchers in malaria-endemic countries.

## St John's College

There are 38 self-governing and independent colleges at Oxford, giving both academic staff and students the benefits of belonging to a small, interdisciplinary community as well as to a large, internationally-renowned institution. The collegiate system fosters a strong sense of community, bringing together leading academics and students across subjects, and from different cultures and countries.

St John's College proposes to offer a Professorial Fellowship in association with the Professorship of Genomics and Global Health. The Professor will be a full member of the College's Governing Body and the Senior Common Room and will be entitled to apply for reimbursement of research expenses up to a maximum of £2,500 per year. A Special Allowance is also available. Professorial Fellows may be asked to act as college advisers for graduate students in their field, and it is hoped that they will play a role in encouraging and developing the research culture within the College.

Founded in 1555, St John's College is among the older of the thirty-eight colleges of Oxford University. Like all the colleges, it is an independent, self-governing establishment, which functions both as an academic institution and as a social and residential centre for its members. The College currently has approximately 375 undergraduate and in excess of 250 graduate students. Most of the subjects on offer at Oxford University can be studied at the College. There are currently approximately 70 students in Medicine or Physiological Sciences, including a number of graduate research students.

The College is committed to maintaining an internationally excellent teaching and research environment. A vibrant international community, it fosters intellectual rigour, creativity, and independence in its students, teachers, and researchers. The College's Research Centre was established in 2001 to provide focus and support for intellectual and academic life, as it already exists and to support new research, particularly of an interdisciplinary nature that might otherwise be unfunded, and to enhance the College's role in promoting first-class innovative research in the University of Oxford and the academic community at large.

Among the Fellows of the College are over 30 Tutorial Fellows, 9 Professorial Fellows and 18 Junior Research Fellows at the present time. All Fellows and some other staff are members of the Senior Common Room, which provides dining and social benefits. The Governing Body of the College, which has overall responsibility for all aspects of the running of the College, comprises the President (the head of the College) and approximately 50 Fellows.

Within St John's there is a broad community of people studying and working in the areas of medical and allied life sciences. The College hopes that the holder of this post will enjoy

considerable interaction with a number of areas and groups in College, with the possibility of synergy with subjects such as geography and psychology.

The College's current Fellowship includes a number of medical scientists. Professor Kevin Gatter, Professor of Pathology, is head of the University's Nuffield Department of Clinical Laboratory Sciences and directs the Cancer Research UK (CRUK) Tumour pathology group in the John Radcliffe Hospital. Professor Andrew Parker, Professor of Physiology, is based in the Department of Physiology, Anatomy and Genetics where his research concerns the visual system. Professor Zoltan Molnar, also in the Department of Physiology, Anatomy and Genetics, has research interests including various aspects of developmental neurobiology. Professor Charles Newton, Cheryl and Reece Scott Professor of Psychiatry, has research interests in neurodevelopmental disorders, including Autistic Spectrum Disorders, epilepsy and sickle cell disease. **Dr Jaideep Pandit is a** Consultant Anaesthetist and Honorary Senior Clinical Lecturer, and is a Supernumerary Fellow and Lecturer in Physiological Sciences in the College. In addition, there is the possibility of interaction with a number of colleagues in other disciplines, including Dr Simon Myers, Supernumerary Fellow in Bioinformatics and a member of the Mathematical Genetics and Bioinformatics Group in the Department of Statistics and Dr Rosalind Harding, University Lecturer in Human Sciences.

More information about the College may be found at <http://www.sjc.ox.ac.uk/>.

# Standard Terms and Conditions

## *Standard duties*

To engage in teaching and research and in clinical and administrative work under the direction of the head of the department.

Under conditions agreed upon between the Board of the Medical Sciences Division and appropriate agents of the NHS, the professor shall perform such clinical, administrative and other duties in the hospitals or general practices associated with the University, as the divisional board may determine or approve.

## *Salary, benefits and pension*

The salary of the professorship will be based on the years of seniority of the successful candidate, plus any applicable NHS merit awards.

An additional pensionable allowance will be payable in respect of any period during which the professor is Head of Department/Faculty Board Chairman. (Any allowance payable for a period of less than three years will not, however, be pensionable.)

Eligible staff may join the Universities Superannuation Scheme. Details are available on the website at <http://www.admin.ox.ac.uk/finance/pensions/uss/>.

## *Length of appointment*

The professorship is tenable until retirement. For all academic staff the University has adopted a retirement age of 30 September before the 68th birthday. There is a procedure for requesting an extension of employment beyond that date.

## *Sabbatical leave and outside commitments*

All professors may apply for sabbatical leave to allow them to focus on their research. In general, one term of leave is available for each six terms worked. This leave may either be taken as one term of leave after 6 terms of service, or accumulated and taken as one year of leave after 6 years of service.

Professors may also spend up to 30 working days in each year on projects outside their employment duties, such as consultancy, spin-out activity and membership of research councils and other bodies. There is no limit to the amount of money which staff may earn from these activities. Full details are available on the university website at <http://www.admin.ox.ac.uk/personnel/staffinfo/academic/approvaltoholdoutsideappointments/> Guidance on ownership of intellectual property (<http://www.admin.ox.ac.uk/statutes/regulations/182-052.shtml>) and managing conflicts of interest (<http://www.admin.ox.ac.uk/researchsupport/integrity/conflict/policy/>) is also available on the university website.

## *Residence*

Clinical Professors are required to reside within the University (i.e. within twenty-five miles of Carfax, the central point of Oxford) during forty weeks in each academical year.

### *Medical Defence Society*

All clinical professors are required to belong to a medical defence society if they are involved in private practice (see below), and it is strongly recommended that those not involved in private practice maintain at least the basic cover provided by such bodies.

### *Private practice*

Holders of clinical professorships are permitted to engage in private practice in the hospitals in Oxford on such terms as the Medical Sciences Board may from time to time determine, provided that such private practice

- (i) shall be undertaken only in the name of the individual clinician concerned;
- (ii) shall be subject to the same general arrangements as govern the holding of consultancies and outside appointments by university employees.

### *Relocation expenses*

Subject to HMRC regulations and the availability of funding, a relocation allowance may be available. Further details are available on the website at <http://www.admin.ox.ac.uk/finance/expenses/relocationscheme/>.

### *Family support*

The University has generous maternity and adoption leave arrangements, and also offers support leave to fathers and partners. Additional paternity leave of up to 26 weeks (for children born or placed for adoption after 3 April 2011) is available where parents decide to share the 52 week maternity leave entitlement. Details are available on the website at <http://www.admin.ox.ac.uk/personnel/during/family/>.

All staff are eligible to apply to use the University nurseries (although there is a long waiting list for nursery places), and the full range of tax and National Insurance savings scheme is in operation. Details are available on the University's childcare website at <http://www.admin.ox.ac.uk/eop/childcare/>.

The University will try to accommodate flexible working patterns as far as possible and there is considerable flexibility in the organisation of duties. More information on family support and flexible working policies is available on the website at <http://www.admin.ox.ac.uk/personnel/during/family/>.

### *Facilities and services*

The University has a range of facilities and benefits for its staff; more details are available on the website at <http://www.admin.ox.ac.uk/personnel/staffinfo/benefits/>.

The University Disability Office provides support to staff and students with a disability and may be contacted through its website at <http://www.admin.ox.ac.uk/eop/disab/>.

### *Equality of opportunity*

The policy and practice of the University of Oxford require that all staff are offered equal opportunities within employment. Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. Subject to statutory provisions, no applicant or member of staff will be treated less favourably than another because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

### *Medical questionnaire and the right to work in the UK*

The appointment will be subject to the satisfactory completion of a medical questionnaire and the provision of proof of the right to work in the UK.

Applicants who would need a work visa if appointed to the post are asked to note that they may need to enter the UK under the Tier 1 (Exceptional talent) category of the UK's points-based system. Further information is available at:

<http://www.ind.homeoffice.gov.uk/workingintheuk/tier1/exceptional-talent/>.

### *Special arrangements*

Oxford welcomes applications from candidates who have a disability. These documents will be made available in large print, audio or other formats on request. Applicants invited for interview will be asked whether they require any particular arrangements to make the interview more convenient and effective for them.

### *Data Protection*

All data supplied by candidates will be used only for the purposes of determining their suitability for the post<sup>1</sup> and will be held in accordance with the principles of the Data Protection Act 1998 and the University's Data Protection Policy (available on the website at <http://www.admin.ox.ac.uk/councilsec/dp/policy.shtml>).

<sup>1</sup> But NB if the person appointed to the post is a migrant sponsored under the UK's points-based migration system, we are required to retain the applications of all shortlisted candidates for one year or until a UK Border Agency compliance officer has examined and approved them, whichever is the longer period.